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                                                                                                                                                                                                                                                (without alignments)
10434.389 Million cell updates/sec
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G902_6/ptodata/1/pubpna/US06_NEW_PUB.seq:*

G902_6/ptodata/1/pubpna/US06_NEW_PUB.seq:*

G902_6/ptodata/1/pubpna/US07_NEW_PUB.seq:*

G902_6/ptodata/1/pubpna/US08_NEW_PUB.seq:*

G902_6/ptodata/1/pubpna/US08_NEW_PUB.seq:*

G902_6/ptodata/1/pubpna/US08_NEW_PUB.seq:*

G902_6/ptodata/1/pubpna/US08_NEW_PUB.seq:*

G902_6/ptodata/1/pubpna/US09_PUBCOMB.seq:*

G902_6/ptodata/1/pubpna/US09_PUBCOMB.seq:*

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GenCore version 5.1.6
Copyright (c) 1993 - 2003 Compugen Ltd.
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10 US-09-815-242-6084

10 US-09-815-242-4046

9 US-10-099-352-1

9 US-10-099-352-3

9 US-10-099-352-3

9 US-09-938-626-2

9 US-09-738-626-1

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0 US-09-738-626-1

0 US-09-834-656-2

10 US-09-834-656-2

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10 US-09-894-300-6389

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Maximum Match 100%
Listing first 45 summaries
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Gapop 10.0 , Gapext 1.0
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Maximum DB seq length: 200000000
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Match Length
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Perfect score:
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Sequence 262, App Sequence 1, Appl Sequence 1, Appl Sequence 85, Appl Sequence 4, Appl Sequence 249, App Sequence 34786, A Sequence 34786, A Sequence 3, Appl Sequence 3, Appl	Sequence 8142, Ap Sequence 8142, Ap Sequence 164, App Sequence 11354, A Sequence 6 13154, A Sequence 6 1312, Ap Sequence 6122, Ap Sequence 6122, Ap Sequence 6149, Ap Sequence 2807, Ap Sequence 332, Ap		2037; s 0; Gaps 0; AGGACGCTATTCAA 1217 AGGATGCCATCAAG 455
10 US-09-070-927A-262 10 US-09-974-300-2033 1 9 US-10-329-960-1 10 US-09-770-149-85 9 US-10-099-352-4 9 US-10-255-536-249 10 US-09-960-352-8446 9 US-09-960-352-8486 9 US-09-960-352-10087	604 9 US-09-796-692-8142 1049 10 US-10-040-862-8142 413 10 US-09-960-352-9570 414 10 US-09-960-352-13154 3813 9 US-10-099-352-6 395 10 US-09-960-352-3954 410 US-09-960-352-9819 424 10 US-09-960-352-6122 424 10 US-09-960-352-6122 425 10 US-09-960-352-6122 426 10 US-09-960-352-6122 427 10 US-09-960-352-6122 428 10 US-09-960-352-6449 732 10 US-09-974-300-6435 520 9 US-10-184-644-332 520 9 US-10-184-644-332	ALIGNMENTS US/09974300 US/09974300 US/09974300 US/09/974,300 US/09/09/974,300 US/09/09/09/974,300 US/09/09/09/974,300 US/09/09/09/974,300 US/09/09/09/09/974,300 US/09/09/09/09/974,300 US/09/09/09/09/974,300 US/09/09/09/09/974,300 US/09/09/09/09/09/974,300 US/09/09/09/09/09/974,300 US/09/09/09/09/09/99/99/99/99/99/99/99/99/	4.2%; Score 164; DB 10; Length 61.4%; Pred. No. 8.5e-36; vative 0; Mismatches 165; Indel GATATCGTGGGAAACAGGTTCCAGTCTTCTTCATTCGTTGGTGGCAACAACATCCCCGGTTTTCTTCATTCGATTCGTTGGTCGCAACAACATCCCCGGTTTTCTTCATTCGATTCGTTTCTTCATTCGATTCGATTCGTTTTCTTCATTCGATTCGATTCGATTCTTCATTCGATTCATTC
20 64 1.7 22 62.6 1.7 23 52.8 1.5 24 55.8 1.4 25 52.8 1.4 26 52.4 1.4 28 52.4 1.4 29 52.4 1.4	C 330 51.8 1.3 C 321 51.8 1.3 3 4 50.2 1.3 3 50.2 1.3 3 6 48.6 1.3 3 6 48.6 1.3 4 7 1.2 C 43 4 4 4 7 1.2 C 44 4 4 4 7 1.2 C 5 4 6 6 6 1.3	RESULT 1 US-09-974-300-2022 Sequence 2022, Application US/099; Patent No. US20020146721A1 GENERAL INFORMATION: APPLICANT: BERA, Randy M.; TITLE OF INVENTION: Methods For 1 TITLE OF INVENTION: Methods For 1 TITLE OF INVENTION: Expression FILE REFERENCE: 10085.500-US CURRENT APPLICATION NUMBER: US/0 CURRENT APPLICATION NUMBER: 09/680; PRIOR FILING DATE: 2001-10-05 PRIOR FILING DATE: 2001-03-7 NUMBER OF SEQ ID NOS: 8481 SOFTWARE: FASISEQ for Windows Vei: TYPE: DNA ORGANISM: Bacillus licheniformitus- US-09-974-300-2022	Query Match Best Local Similarity Matches 263; Conser Qy 1158 GGCAATGTA Db 396 GGGAACTAT

1218 TTCCCTGATTTGATTCACGCTGTCAAGCCGCAACCAGACAGTGAAATTCCCCAGGCTGCA 1277

1278 ACTGCACATGATACGGCATGGGATTTCCTCAGCCAGCAGCCCAGCTCATTGCATGCCCTC 1337

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1398 GTCCATACCTTCCGACTTGTCACCGACGAGGCAACTCGACCTTGGTCAAGTTTCGCTGG 1457
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                               ACTGCACATGATACGGCATGGGATTTCCTCAGCCAGCCCAGCTCATTGCATGCCCTC 1337
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                                                                                700 AGTGCCCACGATACTITCTGGGATTATGTTTCTCTGCAACCTGAAACTCTGCACAACGTG 759
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APPLICANT: Trant, Mailel
APPLICANT: Trant, Mailel
APPLICANT: Trant, Mailel
APPLICANT: Transmoto, Robert T.
APPLICANT: Van mamoto, Robert T.
APPLICANT: Xu, H. Howard
TITLE OF INVENTION: Identification of Essential Genes in
TITLE OF INVENTION: Identification of Essential Genes in
TITLE OF INVENTION: Identification of Essential Genes in
TITLE OF INVENTION: 1000-101A
CURRENT FILING DATE: 2001-03-21
PRIOR FILING DATE: 2000-03-21
PRIOR FILING DATE: 2000-05-25
PRIOR FILING DATE: 2000-05-26
PRIOR FILING DATE: 2000-10-23
PRIOR FILING DATE: 2000-11-27
PRIOR APPLICATION NUMBER: 60/242,578
PRIOR FILING DATE: 2000-11-27
PRIOR FILING DATE: 2000-11-27
PRIOR FILING DATE: 2000-11-27
PRIOR FILING DATE: 2000-12-22
PRIOR FILING DATE: 2000-12-27
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60.0%; Pred. No. 5.2e-33;
tive 0; Mismatches 171;
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LENGTH: 2253
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Sequence 9887, Application US/09815242
Patent No. US20020061569A1
PAPERAL INFORMATION:
APPLICANT: Haselbeck, Robert
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Ohlsen, Kari L.
Zyskind, Judith W.
Wall, Daniel
Trawick, John D.
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Best Local Similarity 60.0
Matches 257; Conservative
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US-09-815-242-9887
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                                                      1398 GTCCATACCTTCCGACTTGTCACCGACGAGGGCAACTCGACCTTGGTCAAGTTTCGCTGG 1457
                                                                                                                                                                                                    580 GGTATITITGACTICGIIGGCAATAACACGCCAATCTICTITATCCAGGAIGCGCATAAA 639
                                                                                      756 GATCCCGACTATCACCGCGGGTTCTGTGGGAAGCGATGAAGAGGCGATGAAGTGGAG 815
576 ATGTGAGCAATGTCTGACAGGGCGATTCCGCGAAGCTACAGGATGATGGAAGGCTTCGGC 635
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APPLICANT: Ohlsen, Kari L.
APPLICANT: Ohlsen, Kari L.
APPLICANT: Zyskind, Judith W.
APPLICANT: Zyskind, Judith W.
APPLICANT: Trawick, John D.
APPLICANT: Trawick, John D.
APPLICANT: Trawick, John D.
APPLICANT: Tawick, John D.
APPLICANT: Tawick, John D.
APPLICANT: Yamanoto, Robert T.
APPLICANT: Yamanoto, Robert T.
APPLICANT: Yamanoto, Robert T.
APPLICANT: Yamanoto, Robert T.
APPLICANT: WINTENTON: Identification of Essential Genes in TITLE OF INVENTION: Prokaryotes
FILE REFERENCE: ELITRA.011A
CURRENT APPLICATION NUMBER: 60/191,078
PRIOR FILING DATE: 2000-03-21
PRIOR FILING DATE: 2000-05-26
PRIOR APPLICATION NUMBER: 60/207,727
PRIOR FILING DATE: 2000-10-23
PRIOR FILING DATE: 2000-10-23
PRIOR FILING DATE: 2000-11-27
PRIOR FILING DATE: 2000-11-22
PRIOR FILING DATE: 2000-11-22
PRIOR FILING DATE: 2000-11-22
PRIOR PELLING DATE: 2001-12-22
PRIOR FILING DATE: 2001-12-22
PRIOR PELLING DATE: 2001-02-16
NUMBER OF SEQ ID NOS: 14110
SSOFTWARE: PESTSED FOR WINDOWS VERSION 4.0
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Pred. No. 5.5e-34;
0; Mismatches 167; Indels
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Patent No. US20020061569A1
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Best Local Similarity 60.7%;
Matches 258; Conservative
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816 TATGAGCT 823
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; LOCATION: (1)...(2262)
US-09-815-242-6084
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Sequence 1, Application US/10099352
Sequence 1, Application No. US20030082569A1
Subblication No. US20030082569A1
GENERAL INFORMATION:
GENERAL INFORMATION:
APPLICANT: Johnson, Clayton H.
APPLICANT: WCEWen, J. Lyndal
APPLICANT: WCEWen, Joan E.
TILLE OF INVENTION: Histoplasma Capsulation and Histoplasmosis
FILE REFERENCE: 40715-255988
CURRENT APPLICATION NUMBER: US/10/099,352
CURRENT FILING DATE: 2002-03-13
PRIOR PILING DATE: 2001-03-13
PRIOR FILING DATE: 2001-03-13
NUMBER OF SEQ ID NOS: 48
SOOTMARE: Patentin version 3.1
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                                                                    TICCCIGATITGATICACGCIGICAAGCCGCAACCAGACAGIGAAAITCCCCAGGCIGCA 1277
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Length 2130;
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 Score 151.2; DB 10; Length
Pred. No. 4.1e-32;
0; Mismatches 173; Indels
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Pred. No. 1.4e-29;
0; Mismatches 184;
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Best Local Similarity 57.9%;
Matches 253; Conservative C
     3.9%;
     Query Match 3.9
Best Local Similarity 59.6
Matches 255; Conservative
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APPLICANT: Cart. Grant J.
APPLICANT: Yamamoto, Robert T.
APPLICANT: Yamamoto, Robert T.
APPLICANT: Yamamoto, Robert T.
TITLE OF INVENTION: Identification of Essential Genes in TITLE OF INVENTION: Prokaryotes
FILE REFERENCE: ELITRA.011A
FILE REFERENCE: ELITRA.011A
FURRENT FILING DATE: 2001-03-21
PRIOR PPLICATION NUMBER: 60/191,078
PRIOR PLILOATION NUMBER: 60/191,078
PRIOR PLILOATION NUMBER: 60/206,848
PRIOR PLILOATION NUMBER: 60/207,727
PRIOR PLILOATION NUMBER: 60/207,727
PRIOR PLILOATION NUMBER: 60/207,727
PRIOR PLILOATION NUMBER: 60/207,727
PRIOR PLILOATION NUMBER: 60/207,931
PRIOR PLILOATION NUMBER: 60/205,931
PRIOR FLILOATION NUMBER: 60/205,931
PRIOR FLILOATION NUMBER: 60/205,308
PRIOR FLILOATION NUMBER: 60/205,931
PRIOR PLILOATION NUMBER: 2000-11-27
PRIOR PLILOATION NUMBER: 60/205,308
PRIOR PLILOATION NUMBER: 60/205,308
PRIOR PLILOATION NUMBER: 2001-02-16
NUMBER OF SED ID NOS: 14110
SED ID NO 4046
LENGTH: 2130
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US-09-815-242-4046
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F: Zyskind, Judith W.
F: Wall, Daniel
F: Trawick, John D.
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Sequence 604, Application US/0998842A

Sequence 604, Application US/0998842A

GENERAL INPORMATION:

APPLICANT: Harper, Jeff

APPLICANT: Harper, Jeff

APPLICANT: Harper, Jeff

APPLICANT: Harger, Joel

APPLICANT: Ameng, Xun

APPLICANT: Ameng, Xun

APPLICANT: Ameng, Xun

APPLICANT: Elu, Tong

TITLE OF INVENTION: STRESS-REGULATED GENES OF PLANTS, TRANSGENIC PLANTS CONTAINING

TITLE OF INVENTION: SAME, AND METHODS OF USE

TITLE OF INVENTION: SAME, AND METHODS OF USE

CURRENT APPLICANTON NUMBER: US 60/227, 866

PRIOR FILING DATE: 2001-08-24

PRIOR APPLICATION NUMBER: US 60/224, 647

PRIOR APPLICATION NUMBER: US 60/204, 647

PRIOR FILING DATE: 2001-06-22

WUMBER OF SEQ ID NOS: 5379

SEQ ID NO 604

LENGTH: 1596
                                                 TCCACGGATTTGCGACCCGTCTGTATACCGATGAAGGCAATTTTGGTAAGCATTATATCG 1092
              1553 TGTTCGTTCGGTTTTCCACCGTCCAGGGCAGCAAAGGCAGTTTCGATACAGTCCGTGATG 1612
                                                                                1613 TCAGAGGTITCGCTACCAAATICTATACGGAAGAAGGAACTGGGATCTTGTTGGCAATA 1672
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Pred. No. 1.1e-14;
0; Mismatches 188;
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Best Local Similarity 52.9%;
Matches 225; Conservative
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Publication No. US20030082569A1
GENERAL INFORMATION:
APPLICANT: Ochason, Clayton H.
APPLICANT: York, J. Lyndal
APPLICANT: York, J. Lyndal
APPLICANT: WEEWEN, Joan E.
TITLE OF INVENTION: Histoplasma Capsulation Catalase Sequences and Their Use in the
TITLE OF INVENTION: of Histoplasma Capsulation and Histoplasmosis
CURRENT APPLICATION NUMBER: US/10/099,352
CURRENT FILING DATE: 2002-03-13
PRIOR APPLICATION NUMBER: US 60/275,353
PRIOR PILING DATE: 2001-03-13
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                                                                                ACAGCACATAACAACTICTGGGACTITGTATATATGCATCCTGAGGCGACGCATATGTTC 718
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GTCCATACCTTCCGACTTGTCACCGACGAGGCAACTCGACCTTGGTCAAGTTTCGCTGG
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Pred. No. 5.5e-29;
0; Mismatches 348;
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ORGANISM: Histoplasma capsulatum CATA
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SOFTWARE: Patentin version 3.1
SEQ ID NO 3
LENGTH: 4529
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Best Local Similarity 50.8%;
Matches 377; Conservative (
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LOCATION: (80)..(80)
OTHER INFORMATION: "n" = any
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! LOCATION: (127). (127)
! OTHER INFORMATION: "n"
US-10-099-352-3
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                                                                 Query Match 2.3%; Score 88.8; DB 9; Length 3309400; Best Local Similarity 52.6%; Pred. No. 1e-11; Matches 226; Conservative 0; Mismatches 192; Indels 12;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ATTILE OF INVENTION: NOVEL POLYNUCLEOTIDES
FILE REFERENCE: 249-125
CURRENT APPLICATION NUMBER: US/09/738,626
CURRENT FILING DATE: 2000-12-18
PRIOR PPLICATION NUMBER: JP 99/377484
PRIOR PPLICATION NUMBER: JP 00/159162
PRIOR PPLICATION NUMBER: JP 00/159162
PRIOR PLICATION NUMBER: JP 00/280988
PRIOR PLICAGITON NUMBER: JP 00/280988
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     MIZOGUCHI, HIROSHI
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   APPLICANT: ANDO, SEIKO
APPLICANT: HAYASHI, MIKIRO
APPLICANT: OCHIAL, KEIKO
APPLICANT: YOKOI, HARUHIKO
APPLICANT: TATEISHI, NOOKO
APPLICANT: SENOH, AKIHIRO
APPLICANT: IKEDA, MASATO
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          APPLICANT: NAKAGAWA, SATOSHI
APPLICANT: MIZOGUCHI, HIROS
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LENGTH: 3309400
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                              GICCACACCIACACTCITAITGCCAAATCTGGAAAAGTTCTCITITGTGAAGTTCCACTGG 795
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52.6%; Pred. No. 2.6e-14;
tive 0; Mismatches 192;
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TITLE OF INVENTION: NOVEL POLYNUCLEOTIDES
FILE REFERENCE: 249-125
CURRENT APPLICATION NUMBER: US/09/738,626
CURRENT FILING DATE: 2000-12-18
PRIOR APPLICATION NUMBER: JP 99/377484
PRIOR FILING DATE: 1999-12-16
PRIOR APPLICATION NUMBER: JP 00/159162
PRIOR APPLICATION NUMBER: JP 00/159162
PRIOR FILING DATE: 2000-04-07
PRIOR FILING DATE: 2000-04-07
PRIOR FILING DATE: 2000-06-03
NUMBER OF SEC ID NOS: 7059
SOFTWARE: PALEGATIN VET. 3.0
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US-09-738-626-285
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Publication No. US20020197605A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  APPLICANT: NAKAGAWA, SATOSHI
APPLICANT: MIZOGUCHI, HIROSHI
APPLICANT: ANDO, SEIKO
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OCHIAI, KEIKO
YOKOI, HARUHIKO
TATEISHI, NAOKO
SENOH, AKIHIRO
IKEDA, MASATO
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Best Local Similarity 52.65
Matches 226; Conservative
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LENGTH: 1506
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APPLICANT:
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APPLICANT:
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Sequence 2, Application US/09834659
Publication No. US20030074697A1
GENERAL INFORMATION:
GENERAL INFORMATION:
GENERAL INFORMATION:
APPLICANT: Co., Ltd.); Randy Dale Allen (Texas tech University)
TITLE OF INVENTION: Cotton plants with improved cotton fiber characteristics and FILE REFERENCE: 204552015600
CURRENT APPLICATION NUMBER: US/09/834,659
CURRENT FILING DATE: 2001-04-16
PRIOR APPLICATION NUMBER: US/09/347,669
PRIOR FILING DATE: 1999-07-05
NUMBER OF SEQ ID NOS: 3
                                                                                                                                     1458 AAGACCTCCAAGGAAGAGCGGCCTGGTATGGGAAGAGGCACAGGGTCTTGGCGGAAAG 1517
              854
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2.3%; Score 87; DB 9; Length 1738;
Best Local Similarity 52.5%; Pred. No. 9.4e-14;
Matches 223; Conservative 0; Mismatches 190; Indels 12;
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PUBLICATION INFORMATION:
AUTHORS: Sibel H. Isin and Randy D. Allen
IIILE: Isolation and characterization of ø
JOURNAL: Plant Molecular Biology
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TYPE: DNA
ORGANISM: Pisum sativum
                                                                                                                                                                                                                                                              TGGGA 1582
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Publication No. US20030041351A1
GENERAL INFORMATION:
APPLICANT: YOSHIAHSA KASURABE, Izumi IHARA, YOSHIAHKO MAEKAWA (TOYODO
APPLICANT: YOSHIAHSA KASURABE, Izumi IHARA, YOSHIAHKO MAEKAWA (TOYODO
APPLICANT: Co., Ltd.); Randy Dale Allen (Texas tech University)
TITLE OF INVENTION: Cotton plants with improved cotton fiber characteristics and meth
FILE REFERENCE:
274897 ACCIACCIGAIGGGIGACCGGGIACCCCIAAGACCICCGGCACGAGGACGGCIICGGC 274956
                                                                                                                                                                                      AAGACCCTCCAAGGAAGAGGGGCCTGGTATGGGAAGAGGCAAAGGCTCTTGGCGGAAAG 1517
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                                          1278 ACTGCACATGATACGGCATGGGATTTCCTCAGCCAGCAGCCCAGCTCATTGCATGCCTC
                                                                      274846 -----GACATGCAGTGGGATTTCTGGACCGGCGCACCTGAATCTGCACAGGTG
                                                                                                       GTCCATACCTTCCGACTTGTCACCGACGAGGGCAACTCGACCTTGGTCAAGTTTCGCTGG
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LOCATION: (57)...(1541)
PUBLICATION INFORMATION:
AUTHORS: Sibel H. Isin and Randy D. Allen
JUTRUE: Isolation and characterization of a pea catalase CDNA
VOLUME: 17
PAGES: 1263-1265
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Pred. No. 9.4e-14;
0; Mismatches 190;
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CURRENT FILLING DATE: 2002-05-21
NUMBER OF SEQ ID NOS: 3
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ORGANISM: Pisum sativum
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US-10-101-736-2
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Best Local
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Sequence 75, Application US/09895913A

Sequence 75, Application US/09895913A

Sequence 75, Application US/09895913A

Patent No. US20020160456A1

GENERAL INFORMATION:

APPLICANT: Al-Garawi, Anal

APPLICANT: Al-Garawi, Anal

APPLICANT: Onene, Raymond P.

TITLE OF INVENTION: Encoding No. US20020160456A1e1 Helicobacter Polypeptides in t TITLE OF INVENTION: Genome

FILE REFERENCE: 06132/043002

CURRENT APPLICATION WUMBER: US/09/895,913A

CURRENT APPLICATION WUMBER: US/09/895,913A

SHOR APPLICATION WUMBER: US/09/895,913A

PRIOR APPLICATION WUMBER: US/09/895,913A

PRIOR APPLICATION WUMBER: US/09/891,227
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1518 AATCCCGACTTCCATCGACAAGACCTCTGGGATGCCATTGAATCTGGAAGGTACCCTGAG 1577
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Pred. No. 1e-12;
0; Mismatches 196;
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SOFTWARE: FastSEQ for Windows Version
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Best Local Similarity 51.7%;
Matches 223; Conservative
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TGGAAATTAAG 976
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; LOCATION: (195)...(1709)
US-09-895-913A-75
                                                                          1578 TGGGA 1582
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US-09-895-913A-75
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APPLICANT: Randy Dale Allen (Texas tech University)
TITLE OF INVENTION: Cotton plants with improved cotton fiber characteristics and meth
TITLE OF INVENTION: producing cotton fibers from these cotton plants
FILE REFERENCE:
CURRENT APPLICATION NUMBER: US/09/834,656
CURRENT FILING DATE: 2001-08-07
NUMBER OF SEQ ID NOS: 3
SEQ ID NO 2.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1458 AAGACCCTCCAAGGAAGAGGGGGCCTGGTATGGGAAGAGGCACAGGCTCTTGGCGGAAAG 1517
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                                                                                             735 AAGCCCACCTGTGGTGTGTATTGGAGGAAGAGGCCATTCAGGTGGGAGGATCC
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Pred. No. 9.4e-14;
0; Mismatches 190; Indels 12;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  NAME/KEY: CDS
LOCATION: (57)...(1541)
PUBLICATION INFORMATION:
AUTHORS: Sibel H. Isin and Randy D. Allen
TITLE: Isolation and characterization of a pea catalase CDNA
JOURNAL: Plant Molecular Biology
                                                                                                                                                                                                                                                                                                                              Sequence 2, Application US/09834656 Patent No. US20020049999A1 GENERAL INFORMATION:
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Best Local Similarity 52.5%;
Matches 223; Conservative (
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ORGANISM: Pisum sativum
                                                                                                                                                                                                           1578 TGGGA 1582
                                                                                                                                                                                                                                            855 TGGAA 859
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             PAGES: 1263-1265
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 LENGTH: 1738
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US-09-834-656-2
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                                                                   APPLICANT: Berka, INCURANTION; APPLICANT: Berka, Randy M.
APPLICANT: Clausen, ID Groth
TITLE OF INVENTION: Methods For Monitoring Multiple Gene
TITLE OF INVENTION: Expression
FILE REFERENCE: 10085.500-US
CURRENT PELLICATION NUMBER: US/09/974,300
CURRENT FILING DATE: 2001-10-05
PRIOR FILING DATE: 2000-10-06
PRIOR PELICATION NUMBER: 09/680,598
PRIOR PELICATION NUMBER: 60/279,526
PRIOR PELICATION NUMBER: 60/279,526
PRIOR FILING DATE: 2001-03-27
NUMBER OF SEQ ID NOS: 8481
SOFTWARE: FESTESEQ for Windows Version 4.0
SEQ ID NO 2082
LENGTH: 1458
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Batent No. US20020146721A1
GENERAL INFORMATION:
APPLICANT: Berka, Randy M.
APPLICANT: Clausen, Ib Groth
TITLE OF INVENTION: Methods For Monitoring Multiple Gene
FILE REFERENCE: 10085.500-US
                    Sequence 2082, Application US/09974300
Patent No. US20020146721A1
GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                         ; ORGANISM: Bacillus licheniformis US-09-974-300-2082
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Pred. No. 9.3e-11;
0; Mismatches 110; Indels
CURRENT APPLICATION NUMBER: US/09/974,300
CURRENT FILING DATE: 2001-10-05
PRIOR APPLICATION NUMBER: 09/680,598
PRIOR FILING DATE: 2000-10-06
PRIOR FILING DATE: 2001-03-7
NUMBER OF SEQ ID NOS: 8481
SEQ ID NO 6436
LENGTH. 462
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Best Local Similarity 56.2%;
Matches 141; Conservative
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; ORGANISM: Bacillus clausii
US-09-974-300-6436
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Scoring table:

Searched:

Database

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Prade, R. and Roe, B.

An Aspergillus nidulans EST Database
An Aspergillus nidulans EST Database
Unpublished (1988)
L. Other, EST: (folizal, Folizal)
Contact: Bruce A. Roe, University of Oklahoma, broe@ou.edu
Department of Chemistry and Biochemistry
Advanced Center for Genome Technology, University of Oklahoma
620 Parrington Oval, Norman, OK 73019, USA
Tel: 405 325 7462
Emmal: broe@ou.edu
We anticipate the future release of the cDNA clones to the Fungal
Genetics Stock Center
Seq primer: T3
                                                 AW758424 874008A09
BP052861 ESST438091
BD0905289 Tad3. Gdd
AL826874 AL826874
BB430693 SUN007. BD
BB430693 SUN007. BD
BB404604 ESST578931
BJ388480 BJ388480
AV926103 AV926103
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AV92170 BB7785614
BJ48186 BB7785617
BJ481863 BJ481863
AV941687 AV944081
AV941687 AV941687
AV941687 AV9400.D
BJ481679 AV950517
AV939611 AV939611
AV956803 AV556803
BM134400 WHE0489_G
BB038083 AA08F07 A
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BM113806 EST561342
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Emericella nidulans
Emericella nidulans
Eukaryota; Fungi; Ascomycota; Pezizomycotina; Eurotiomycetes;
Eurotiales; Trichocomaceae; Emericella.

1 (bases 1 to 311) ...... T 121 H Martin, W., Aramayo, R.
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AZ577487
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BP052861
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AV246103
AV251128
BJ478364
AV942041
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RESULT 1
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DEFINITION
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AUTHORS
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B0143257 fmhlc.pk0
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                                                                                                                                    June 11, 2003, 17:43:15 ; Search time 5081 Seconds
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                    GenCore version 5.1.6
Copyright (c) 1993 - 2003 Compugen Ltd.
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EST 19-0CT-1998

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TITLE
JOURNAL
COMMENT
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BH389231
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                                                                                      /Organia-FGSC A26"
/db_xref="taxon:162425"
/db_xref="taxon:162425"
/clone_"fff12a1"
/clone_lb="Aspergillus nidulans 24hr asexual
/clone_lb="Aspergillus nidulans 24hr asexual
developmental and vegetative cDNA lambda zap library"
/tissue_type="vegetative mycella, asexual structures"
/note="vector: pBlueScript Sr-; Site_1: EcoRi; Site_2:
Xhol; 5' end of cDNA cloned into EcoRi site of pBluescript
3' end of cDNA cloned into Ahol site of pBluescript
57 a ll0 c 76 g 68 t
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Metarhizium anisopliae var. acridum.
Eukaryota; Fungi: Ascomycota; Pezizomycotina; Sordariomycetes;
Hypocreales; Clavicipitaceae; mitosporic Clavicipitaceae;
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/organism="Metarhizium anisopliae var. acridum"
                                                                                                                                                                                                                                                                                                                                                                                                                                           Score 179.8; DB 9; Length 311;
Pred. No. 2.4e-27;
0; Mismatches 82; Indels 0
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                                                                             /organism "Emericella nidulans"
  ity sequence stop: 294.
Location/Qualifiers
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Location/Qualifiers
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EST.
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Best Local Similarity 73.6%;
Matches 229; Conservative (
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High quality
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Best Local (
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/gtrain="ARSEF 324"
/db_xref="taxon:92637"
/clone_lib="Metarhizium anisopliae sf. acridum ARSEF 324"
/note="vector: Unizap; Metarhizium anisopliae sf. acridum was grwon on insect cuticle and chitin for 24 hours. A common libert was constructed in the unidirectional Lambda
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Direct Submission of BAC-end sequences from Anopheles gambiae
Unpublished (2001)
Other, GSSS: AG-MD-14655.TR
Contact: Brendan J Loftus
Department of Eukaryotic Genomics
The Institute for Genomic Research
9712 Medical Center Dr., Rockville, MD 20850, USA
Tel: 301 838 0208
Fax: 301 838 543
This close is from an A. gambiae BAC library (ND-TAM) provided by
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AG-ND-14655.TF ND-TAM Anopheles gambiae genomic clone AG-ND-146J5,
DNA sequence.
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Eukaryota, Metazoa, Arthropoda, Hexapoda, Insecta, Pterygota,
Neoptera, Endopterygota, Diptera, Nematocera, Culicoldea,
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                                                                                                                                                                                                                                                             DB 14; Length 547;
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Best Local Similarity 68.9%; Pred. No. 1.6e-19;
Matches 210; Conservative 0; Mismatches 94
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1 (bases it o 413)
Ereimoser.F.M. Screen, S., Baga, S., Hu, G. and St. Leger, R.J.
EST analysis of genes expressed by two different insect pathogenic fungl during optimized secretion of proteins
Unpublished (2002)
Contact: Freimoser F. M.
Department of Entomology
University of Maryland
4112 Plant Sciences Building, College Park, MD 20742, USA
Tel: 301 405 16 13
Fax: 301 314 92 90
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/strain="ARSER 324"
/db_xref="taxon:98537"
/clone_lib="Metarhizium anisopliae sf. acridum ARSEF 324"
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Metarhizium anisopliae var. acridum
Eukaryote; Fungi; Ascomycota; Pezizomycotina; Sordariomycetes;
Hypocreales; Clavicipitaceae; mitosporic Clavicipitaceae;
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                                                                                                                                                                                                                                                                                                                                                                                 Length 489;
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Pred. No. 1.3e-18;
0; Mismatches 123; Indels
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    .489
    /organism="Anopheles gambiae"

                                                                                                                                           /strain="PEST"
/db_xref="taxon:7165"
/clone="AG-ND-146J5"
/clone_lib="ND-TAM"
/note="Vector: pECBAC1; Si
a 166 c 141 g 90
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Location/Qualifiers
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BO143257.1 GI:20280316
EST.
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Best Local Similarity 63.3%;
Matches 212; Conservative
primer: M13 For
   Seq primer: M13
Class: BAC ends
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Triticum aestivum
Bukaryota; Viridiplantae; Streptophyta; Embryophyta; Tracheophyta;
Bukaryota; Viridiplantae; Streptophyta; Poales; Poaceae; Pooldeae;
Spermatophyta; Magnollophyta; Liliopsida; Poales; Poaceae; Pooldeae;
Triticeae; Triticum.
1 (bases Ito 606)
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BE518097 GI:9742043
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/cultivar-"Chinese Spring"
/db_rer_taxon.f456s"
/clone="WHE0810_H01_002"
/clone_lib="Wheat vernalized crown cDNA library"
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Sequence have been trimmed to remove vector sequence and
Sequence have been trimmed score less than 20
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                                                                                                                                                                                                      4 others
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US Department of Agriculture, Agriculture Re
West Area, Western Regional Research Center
800 Buchanan Street, Albany, CA 94710, USA
Tel: 5105595773
Fax: 5105595818
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Best Local Similarity 60.9
Matches 213; Conservative
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Best Local Similarity 54.2
Matches 232; Conservative
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/tissue_type="Crown tissue of seedling"
/dev_stage="Five-week old seedling"
/lab_lost="E. coll Sour"
/note="Vector: Labbda Uni-ZaP XR, excised phagemid;
Site_1: ECORI; Site_2: XhoI; Seeds were germinated and grown at 4 C for 5 weeks. The tissue, total RNA, and poly(A) RNA were prepared, a CDNA library was made, and the CDNA clones were in vivo excised to give pBluescript. Phagemids in the TJ Close lab (Choi, Close, Fenton) at the University of California, Riverside. Plasmid DNA preparations and DNA sequencing were performed in the OD Anderson lab (all other authors):
                                                                                                                                                                                                                                                                                                    TTCCCTGATTTGATTCACGCTGTCAAGCCGCAACCAGACAGTGAAATTCCCCAGGCTGCA 1277
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Eukaryota; Viridiplantae; Streptophyta; Embryophyta; Tracheophyta;
Spermatophyta; Magnollophyta; Liliopsida; Poales; Poaceae; Pooideae;
Triticaea; Triticum.
1 (bases 1 to 746)
Anderson,O.D., Chao,S., Choi,D.W., Close,T.J., Fenton,R.D., Han Seaton,C.L. and Tong,T., Lazo,G.R., Miller,R., Rausch,C.J.,
The structure and function of the expressed portion of the wheat genomes - Pre-anthesis spike cDNA library
Oupublished (2000)
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                                                                                                                                                                                                                                                                           0; Mismatches 184; Indels
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Pred. No. 1.7e-10;
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Contact: Olin Anderson
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AUTHORS
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COMMENT
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/ultivar="Chinese Spring"
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/duttivar="Chinese Spring"
/clone="WHE2332_E11_J22"
/clone="Ib="Wheat pre-anthesis spike cDNA library"
/tissue_type="Spike before anthesis"
/dev_stage="Adult plant"
US Department of Agriculture, Agriculture Research Service, Pacific West Area, Western Regional Research Center 800 Buchanan Street, Albany, CA 94710, USA 7Te1: 510559573
Fax: 510559573
Fax: 5105595818
Email: oandersnépw.usda.gov
Sequence have been trimmed to remove vector sequence and low sequence have been trimmed score less than 20
Seq primer: Stratagene SK primer.
Location/Qualifiers
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EST492317 cSTS Solanum tuberosum cDNA clone cSTS5C5 5' sequence,
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Triticum aestivum
                                                                                                                                                                                                                                                                                                                                                                                                                                   Tel: 5105595773
Fax: 5105595818
                                                                                                                                                               bread wheat
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1218 TTCCCTGATTTGATTCACGCTGTCAAGCCGCAACCAGACAGTGAAATTCCCCAGGCTGCA 1277
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Makaryota; Viridiplantae; Streptophyta; Embryophyta; Tracheophyta;
Spermatophyta; Magnollophyta; eudicotyledons; core eudicots;
Asteridae; euasterids I; Solanales; Solanaceae; Solanum.
1 (bases 1 to 588)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        /note="Vector: pBluescript SK(-); Site_1: EcoRI; Site_2:
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                                                                                                                                                          van der Hoeven, R., Bezzerides, J., Sun, H., Cho, J., Chiemingo, A., Bougri, O., Buell, C.R., Ronning, C., Tanksley, S. and Baker, B. Generations of ESTs from sprouting potato eyes Unpublished (2000)
Contact: Cathy Ronning
The Institute for Genomic Research
The Institute for Genomic Research
For clone info: please contact Research Genetics, Libraries Division tell 1-800-711-6195, email cdna@tesgen.com
Seq primer: M13F-R.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Length 588;
                                                                                                                                                                                                                                                                                                                                                                                                                                    /tissue_type="sprouting eyes from tubers"
/dev_stage="12-14 weeks post harvest"
/lab_host="SOLR"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Score 98; DB 12;
Pred. No. 3.6e-10;
                                                                                                                                                                                                                                                                                                                                      1. 588
/organism="Solanum tuberosum"
/cultivar="Kennebec"
/db_xref="taxon:4113"
/clone="cSTS5C5"
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                                                                                                                                                                                                                                                                                                                 Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           134 g
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mRNA sequence.
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BG593639.1 GI:13611779
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al Similarity 54.0%;
231; Conservative
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                                                                   potato.
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/tissue_type="Spike"
/dev_stage="Adult plant"
/dev_stage="Adult plant"
/dev_stage="Adult plant"
/lab_host="E. coli $50LR."
/note="Woctor: Lambda Unl-ZAP XR, excised phagemid;
Site_1: EcoRI; Site_2: XhoI; Plants were grown in the greenhouse. Spikes at 5, 10 and 15 DAP were harvested, total RNA and poly(A) RNA were prepared, a cDNA library was made, and the CDNA clones were in vivo excised to give pBluescript phagemids in the TJ Close lab (Choi, Close, Fenton) at the University of California,
Riverside. Plasmid DNA preparations and DNA sequencing were performed in the OD Anderson lab (all other authors
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1337
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1 (bases 1 to 591)

Anderson, O.D., Chao, S., Choi, D.W., Close, T.J., Fenton, R.D., Han, P.S., Hsia, C.C., Kang, Y., Lazo, G.R., Miller, R., Rausch, C.J., Seaton, C.L. and Tong, J.C.
The structure and function of the expressed portion of the wheat genomes - 5-15 DAP spike cDNA library
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So Bepartment of Agriculture, Agriculture Research Service, Pacific
West Area, Western Regional Research Center
800 Buchanan Street, Albany, CA 94710, USA
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WHE0945_D09_G17ZS Wheat 5-15 DAP spike cDNA library Triticum aestivum cDNA clone WHE0945_D09_G17, mRNA sequence.
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/organism="Triticum aestivum"
/cultivar="Chinese Spring"
/db_xref="taxon:4565"
/clone="WHE0945_D09_G17"
/clone=lib="Wheat 5:15 DAP spike cDNA library"
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Eukaryotes, Viridiplantae; Streptophyta; Embryophyta; Tracheophyta; Spermatophyta; Magnollophyta; Liliopsida; Poales; Poaceae; Pooldeae; Triticeae; Hordeum.

1 thases 1 to 713)

Wing, R., Close, T.J., Kleinhofs, A., Wise, R., Begum, D., Frisch, D., Yu, Y., Henry, D., Palmar, M., Rambo, T., Simmons, J., Choi, D.W., Fenton Development of a genetically and physically anchored EST resource for barley genomics: Morex drought-stressed seedling shoot cDNA
                                       1398 GTCCATACCTTCCGACTTGTCACGACGAGGGAACTCGACGTTGGTCAAGTTTCGGTGG 1457
                                                                                                                   AAGACCCTCCAAGGAAGAGCGGGCCTGGTATGGGAAGAGGCACAGGCTCTTGGCGGAAAG 1517
                                                                                                                                                                                               AATCCCGACTTCCATCGACAAGACCTCTGGGATGCCATTGAATCTGGAAGGTACCCTGAG 1577
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204 ITCTICCICITCGACGACGICGGCAICCCCACCGACTACCGCCACAIGGACGGCTICGGC 263
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                                                                                                                                                        324 AGGCCCACCTGCGGCGTCACGTGCTCCATGGACGACGAGGCCACCCTCGTCGGCGGCAAG
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/organism="Hordeum vulgare"
/cultivar="Moreax"
/db_xref="Laxon:45]3"
/clone="HvSMEb0012E16f"
/clone="Lb="Hordeum vulgare seedling shoot EST library
/tissue_Lype="Seedling shoot"
/tissue_Lype="Seedling shoot"
/lab_host="TJC121"
                                                                     264 GTCAACATCTACGTCTCCCGCGCTGGCAAGTCCCACTACGTCAAGTTCCACTGG
                                                                                                                                                                                                                       HVSWEb0012E16f Hordeum vulgare seedling shoot EST 122-
HVCDNA0002 (Dehydration stress) Hordeum vulgare cDNA clone
HFSPEb0012E16f, mRNA sequence.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               library
Unpublished (2001)
On Dec 19, 2000 this sequence version replaced gi:11894780.
Contact: Wing RA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    100 Jordan Hall, Člemson, SC 29634, USA
Tel: 864 656 7288
Fax: 864 656 4293
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Clemson University
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Email: rwing@clemson.edu
Total hq bases = 530
Seq primer: AATTAACCCTCACTAAAGGG
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Hordeum vulgare
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1218 TTCCCTGATTTGATTCACGCTGTCAAGCCGCAACCAGACAGTGAAATTCCCCAGGCTGCA 1277
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Penton). Phagemids were plated and picked at the Clemson University Genomics Institute (CUGI) (Begum, Palmer, Frisch, Atkins and Wing). Plasmid DNA preparations, DNA sequencing and sequence analysis were performed at CUGI (Wing, Yu, Frisch, Henry, Simmons, Oates, Rambo, Main). The sequence has been trimmed to remove vector sequence and contains a minimum of 100 bases of phred value 20 or above. For more details on library preparation and
                                                                                                                                                                                                                                     sequence analysis see http://www.genome.clemson.edu/projects/barley. To order this clone see http://www.genome.clemson.edu/orders Also see Close TJ, Wing R, Kleinhofs A, Wise R (2001) Genetically and physically anchored EST resources for barley genomics. Barley Genetics. Newsletter 31:29-30. (http://wheat.pw.usda.gov/ggpages/bgn/31/cover.html)" 294 c 175 g 118 t
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Chlamydomonas reinhardtii
Eukaryota; Viridiplantae; Chlorophyta; Chlorophyceae; Volvocales;
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Grossman, A., Davies, J., Federspiel, N., Harris, E., Lefebvre, P.,
McDermott, J. P., Silflow, C., Stern, D. and Surzycki, R.
Analyses of the Chlamydomonas reinhardtil Genome: A Model,
Unicellular System for Analyzing Gene Function and Regulation in
Vascular Plants; project phase 2
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     2.5%; Score 98; DB 12; Length 713; llarity 54.0%; Pred. No. 3.6e-10; Conservative 0; Mismatches 185; Indels
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Tracheophyta

Embryophyta; Trachecedons; core eudicots;

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/note-"Vector: pBlueScript SK(-); Site_1: EcoR1; Site_2: Xho1; Tissue was supplied by Dr. Fry (Cornell University). Leaflets and petioles were isolated from 8 week old greenhouse grown plants. The plants were watered and fertilized freely. The tissue was immediately frozen in liquid nitrogen."
                                                                                       Asteriade; euasterids I; Solanales; Solanaceae; Solanum.
1 (bases 1 to 632)
van der Hoeven, R.S., Bezzerides, J., Holt, I.E., Liang, F., Cho, J.,
Utterback, T., Hansen, C.L., Doan, B., Bougri, O., Buell, C.R., Ronning
C.M., Fry, W.E., Tanksley, S.D. and Baker, B.
Generation of ESTs from potato leaves and petioles
Upublished (2000)
                                                                                                                                                                                                                                           Contact: Cathy Ronning
The Institute for Genomic Research
For clone info: please contact Research Genetics, Libraries
Division tel 1-800-711-6195, email cdna@resgen.com.
Locatlon/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                /clone_lib="potato leaves and petioles"
/tissue_type="leaflets and petioles"
/dev_stage="8 weeks old plants"
/lab_host="SOLR"
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Spermatophyta; Magnoliophyta; eudicotyledons;
                                                                                                                                                                                                                                                                                                                                                           /organism="Solanum tuberosum"
/cultivar="Kennebec"
/db_xref="taxon:4113"
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                                                                                                                                                                                                                                                                                                                                                                                                                               /clone="cSTB33E12
                   potato.
Solanum tuberosum
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Matches 230;
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/organism="Chiamydomonas reinhardtii"
/strain="Cc-1690 wild type mt+ 21gr"
/db_xref="taxon:3055"
/clone_lib="C. reinhardtii CC-1690, Lambda Zap II"
/db_xref="taxon:3055"
/clone_lib="C. reinhardtii CC-1690, Lambda Zap II"
/note="vector: pBluescript II SK-; Site_1: EcoRI; Site_2:
XhoI; This library, constructed by John Davies and Jeffrey McDermott, combines cDNAs from CC-1690 cells grown to mid-log phase in TAP (acctate-containing) medium in the light, TAP medium in the dark. HS (minimal) medium in ambient levels of CO2 and HS medium bubbled with 5% CO2. PolyA mRNA was purified from each sample, pooled and cDNA synthesized: The cDNA was directionally cloned into lambda ZAP II (Stratagene) in the EcoRI (5') and XhoI (3') sites. pBluescript II SK- plasmids were excised from the lambda ZAP clones by superinfection with ExAssist (Stratagene)
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Unpublished (2000)
Contact: Elizabeth H. Harris
DCMB Box 91000
Duke University
Durham, NC 27708-1000, USA
Tel: 919 613 8164
Fax: 919 613 8174
Email: chlamy@duke.edu.
Location/Qualifiers
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1277 1337 1397 1457 1518 AATCCCGACTTCCATCGACACACACTCGGGATGCCATTGAATCTGGAAGGTACCCTGAG 1577 1458 AAGACCCTCCAAGGAAGAGCGGGCCTGGTATGGGAAGAGGCCACAGGCTCTTGGCGGAAAG 1517 273 321 381 441 501 561 TICCCTGATTTGATTCACGCTGTCAAGCCGCAACCAGACAGTGAAATTCCCCAGGCTGCA 214 ITCCCTGACATGGTCCATGCTCTGAAGCCAAATCCTAAGTCCCATATCCAGGAGAATTGG 274 AGGGTCCTT-----GATTTTTTCTCTCATCATCCGGAAAGCCTGCACATGTTC 322 ACTITCCTCTTCGACGATATTGGTATTCCACAGATTACAGGCATATGGACGGGTCTGGT .398 GTCCATACCTTCCGACTTGTCACCGACGAGGCCAACTCGACCTTGGTCAAGTTTCGCTGG 502 AATCACAGCCATGCTACTCAGGACCTCTATGACTCTATTGCAGCTGGAAATTATCCTGAA 1278 ACTGCACATGATACGCCATGGGATTTCCTCAGCCAGCCCCAGCTCATTGCATGCCCTC Length 632; 2.5%; Score 96.4; DB 12; ilarity 53.7%; Pred. No. 7.9e-10; Conservative 0; Mismatches 186; 180 t

us-09-674-195c-1.rst

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1517 GAATCCCGACTTCCATCGACAAGACCTCTGGGATGCCATTGAATCTGGAAGGTACCCTGA 1576
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1 (bases 1 to 456)
Wilson,I., Beswick,R., Shepherd,S., Barker,G., Parker,J., Owen,P., Edwards,D., Coghill,J., Holdsworth,M., Lenton,J., Shewry,P. and
                                                                                                                                                                                                                                                                                                                                           AL826874 AL826874 p:638 Triticum aestivum cDNA clone G01_p638_plate_10, mRNA
               391 G-AGGCCCACCKGSGGCGTCASKGCCTCATGGACGACGAGGCCACGCTCGKCGGCGGCAA 449
                                                                                           TICCCIGATITGATICACGCIGICAAGCCGCAACCAGACAGTGAAATICCCCAGGCTGCA 1277
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Pred. No. 1.3e-09;
0; Mismatches 187; Indels
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Contact: Barker G
Institute of Arable Crop Research
Long Ashton, Bristol BS41 9AF United Kingdom.
Location/Qualifiers
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/organism="Triticum aestivum"
/cultivar="mercia"
/db_xref="taxon:4565"
/clone="G01_p638_plate_10"
/clone="G01_p638_"
/tlssue_type="normal seedlings"
/dev_stage="21 days old"
6 a 189 c 102 g 78 t ::
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Best Local Similarity 53.5%;
Matches 229; Conservative
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                                    EST 19-AUG-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          /organism="Triticum aestivum"
/cultivar="FHB148"
/db_xref="taxon:4565"
/clone="Ta03_06406"
/clone="Ta03_AAFC_ECORC_Fusarium_graminearum_inoculate
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              /note="vector: pdBM-T easy, Site_1: EcoRI; Site_2: EcoRI; Controled chamber-grown wheat heads were spray incoulated at mid-anthesis with a Fusarium graminearum mercoconidial suspension (50,000 spores/ml) and kept under intermitent misting for 24 hours, then collected and immediately force in liquid nitrogen. 204 g 138 t 21 others
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       GAAGACCTCCAAGGAAGAGGGGCCTGGTATGGGAAGAGGCACAGGCTCTTGGGGGAAA 1516
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                                                                           Ta03_AAFC_ECORC_Fusarium_graminearum_inoculated_wheat_heads
__riticum_aestivum cDNA clone Ta03_06d06, mRNA sequence.
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Pred. No. 1e-09;
1; Mismatches 178; Indels 12
                                    linear
                                 MRNA
                               822 bp
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/tissue_type="heads"
/dev_stage="anthesis"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Tel: (613) 759-1658
Fax: (613) 759-1701
Email: ouellettr@em.agr.ca.
Location/Qualifiers
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2.5%; Sco
Best Local Similarity 53.1%; Pre
Matches 228; Conservative 11;
                                                                                                                                                    BQ902589.1 GI:22301373
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/note="Vector: pBluescript SK(-); Site_1: EcoRI; Site_2:
Note="Vector: partial platesity, Tanksley lab.
sequencing: The Institute for Genomic Research. Roots were
isolated from in vitro grown stem cuttings on CM medium.
Scots were isolated two weeks after placing the stem
cuttings from in vitro grown plants on medium.

1 155 g 202 t
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1 (bases 1 to 702)
van der Hoeven,R., Sun,H., Karamycheva,S.A., Tšai,J., Van Aken,S., Qtterback,T., Chiemingo,A., Bougri,O., Buell,C.R., Ronning,C., Tanksley,S. and Baker,E. Generation of ESTs from potato roots
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1278 ACTGCACATGATACGGCATGGGATTTCCTCAGCCAGCAGCCCAGCTCATTGCATGCCCTC
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                                                                                                                 1518 AATCCCGACTTCCATCGACAAGACCTCTGGGATGCCATTGAATCTGGAAGGTACCCTGAG
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        /clone="cPRO21222"
/clone_lib="potato roots"
/tlssue_type="roots"
/dev_stage="in vitro grown stem cuttings"
/lab_host="SOLR"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    For clone info: please contact Research Genetics, Division tel 1-800-711-6195, email cdna@resgen.com
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Unpublished (2001)
Contact: Research Genetics, Libraries Division
Tel: 1-800-711-6195
Bmail: cdna@resgen.com
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Pred. No. 1.7e-09;
0; Mismatches 187;
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70rganism="Solanum tuberosum"
/cultivar="Rennebec"
/db_xref="taxon:4113"
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EST578931 potato roots So
end, mRNA sequence.
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BM404604.1 GI:18256080
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Eukaryota, Viridiplantae; Streptophyta; Embryophyta; Tracheophyta; Spermatophyta; Magnoliophyta; Liliopsida; Poales; Poaceae; Pooldeae; Triticeae; Triticum.

1. (bases 1 to 569)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             356
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            1518 AATCCCGACTTCCATCGACAAGACCTCTGGGATGCCATTGAATCTGGAAGGTACCCTGAG 1577
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Anderson, O. A., Appels, R., Bailey, P., Blake, T., Close, T., Cloutier, S., Dubcovsky, J., Feuillet, C., Gale, M., Graner, A., Gustafson, P., S., Dubcovsky, J., Feuillet, C., Gale, M., Graner, A., Gustafson, P., Langridge, P., Lazo, G. R., Lin, J. J., McGuire, P., Ogihara, Y., Pecchioni, N., Qualset, C., Schuch, W., Selvaraj, G., Shariflou, M., Sorrells, M., Warburton, M. and Wenzel, G.
International Triticeae EST Cooperative (ITEC): Production of Expressed Sequence Tags for Species of the Triticeae
Unpublished (2000)
Contact: Shariflou M.
                                           129 TICCCCGACGICATCCACGCCTICAAGCCCAACCCCAAGICCCACGIGCAGGAGI----
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/organism="Triticum aestivum"
/db_xref="taxon:4565"
/clone="SUNOT.BO7"
/clone=lib="ITEC SUN Wheat cDNA Library"
226 c 139 g 93 t 1 others
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Plant Breeding Institute, University of Sydney 107 Cobbitty Rd., Cobbitty NSW 2570 Australia Tel: 61 2 9351 8803
Fax: 61 2 9351 8851
Fax: 61 2 9351 8851
International Triticeae EST Cooperative (ITEC) http://wheat.pw.usda.gov/genome.
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1larity 53.5%; Pred. No. 1.7e-09;
Conservative 0; Mismatches 187;
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Matches 229; Conserv
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Search completed: June 11, 2003, 22:17:32 Job time : 5091 secs

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(without alignments)
12036.728 Million cell updates/sec
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cgn2_6/ptodata/1/pna/US08_COMB.seq:*

cgn2_6/ptodata/1/pna/US09_COMB.seq:*

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GenCore version 5.1.6
Copyright (c) 1993 - 2003 Compugen Ltd.
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Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

		Description		sednence I, Appli	Sequence 36590, A	Sequence 6172. An	Sequence 4942 An		Section of 187		Codingroup 0500	Segmente 3302, Ap	Sequence 3/13, Ap	sednence ross, Ap	Sequence 2192, Ap	Sequence 5840. An				, ,	sednence 1924, Ap	Sequence 42972, A	-		•	•	Sequence 3735, Ap
		ID	TS-07-845-000-1	T 066 640 10 55	US-60-360-039-36590	US-60-138-103-6172	US-09-404-520-4942	US-60-360-039-27243	US-09-404-520-28164	US-09-417-507-19771	US-60-082-300-9502	08-09-533-559-5719	US-09-675-7848-1693	TO 000 000 000 000 000 000 000 000 000 0	05-00-082-300-5182	US-09-533-559-5840	US-09-417-507-19777	. US-09-417-507-19769	US-09-417-507-19772	TS-60-126-265-1924	#70T CO4 044 00 00	US-60-360-039-42972	US-09-902-540-9468	US-09-902-540-1007	US-60-360-039-47146	0 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 -	05-09-252-69-35
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	-	Score	439	300	0 7 0	386	396	345.6	343.8	318.6	286	279.4	259.8	252.6	0.00	7.047	236.8	214.8	199.2	195.8	1 70 4	* 0 7	1/8.4	178.4	173.8	172 2	•
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pna/US102A COMB.

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GGTGGGGCGTCCATACCTTCCGACTTGTCACCGACGAGGGCAACTCGACCTTGGTCAAGT 1449
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1192 GCTACGGAGTCCACAGCTTCCGCTCGTCGCCAATGGCACTTCCAAGGTGGTGCGAA 1251
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1090 TCGTGGTAGTCATACTCATAACAGCACAACAAATATGAATACAAACCCAGGACCTAGGCT 1149
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ATAATAACTGGTCGAATATCACAGCCGCATCCTTCTTGAACGCGGCAGGAAAGCAGACAC 969
                                                                                                                                                                                                                                                                                                                                                                               CCAACTCTACTTGAGGATTTTATCTTCCGCCAGAAGATTCAACACTTTGATCATGAGAGG 793
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          GIAAGIACAGIAACIGCIGCGGIGIGIAGIAACAAIAAAIIGACCCAGIGGIIIICAAII 680
                                                                                                                           327 ATGCGTCATTICTGGCTTTTTGCCAGCTGTTGCTGGTATCGCTGGGGCTCAATGCCCCTAC 386
                                                                                                                                                                                                 387 CTGTCGGGTGAATGAGTTTCACCCAGGAGCAGGACAATGCTGGC-----GATACCATT 440
                                                                                                                                                                                                                                     614 TCCGACCCTACGGACCAGTTTCTTAGCAAGTTTTACATTGACGATGAACAGTCGGTGCTA 673
                                                                                                                                                                                                                                                                                                           ACAACGGACGTGGGTGGTCCCATCGAGGACCAACACAGCCTGAAGGCTGGAAATAGAGGC 733
                                                                                                                                                                                                                                                                                                                                963 -----CTACTAGACATGGTGGGTATCAATTTGGCCCCTTCTTCATCCAGGACG
                                                                                                                                                               554 ATGTCAGGGGAGATGCCTAGCGGTCAGAAAGGCCCCCTCGATCGCCGCCATGACACTCTC
                                                                                                                                                                                                                                                                       GAGGICACGGAGCAGCCCATTGACAACACCCTGTATGTCAATGACACCGGTAGCTACATG
                                                                                                                                                                                                                                                                                                                                                                                                                     561 CCTACCCTGTTGGAGGACTTTATCTTCCGTCAGAAGCTTCAGCGGTTCGACCATGAGCGT
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                                                                                                                                                                                                                                                                                                                                                                                                                                                       GTATGTAGATACA----AAATATGTGACCGTGTTGCAAATCCGCTAATTCAATTTACGC
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                                                                                       494 ATGCGGTCGCTCAAGCTTATACTCGCCTCGGCGGGTGTTGTTTCTGCAGCCTGTCCCTAC
                                                      Gaps
               Score 439; DB 3; Length 3107;
Pred. No. 1.1e-86;
0; Mismatches 760; Indels 220;
                  Query Match
Best Local Similarity 54.9%;
Matches 1195; Conservative
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                  sequence 44226, A
Sequence 24021, A
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Sequence 31235, A
Sequence 34178, A
Sequence 34178, A
Sequence 34178, A
Sequence 2418, Ap
Sequence 4486, A
Sequence 40960, A
Sequence 6084, Ap
Sequence 24541, A
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        SECURIOR OF APPLICATION US/07845990

GENERAL INFORMATION:
APPLICANT: BERKA, RANDY M
APPLICANT: FOULER, TIMOTHY
APPLICANT: FOULER, PEKKA
TITLE OF INVENTION: USE OF ASPERGILLUS NIGER CATALASE-R FOR
TITLE OF INVENTION: HYDROGEN PEROXIDE NEUTRALIZATION
NUMBER OF SEQUENCES:
ADDRESSE: GENERCOR INTERNATIONAL, INC.
STREET: 180 KIMBALL WAY
CITY: SOUTH SAN FRANCISCO
STATE: CALIFORNIA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            join(327..620, 683..907, 969..1385, 1440..1604, 1654..2745)
US-09-252-691C-3735

US-60-360-039-44226

US-60-360-039-47050

US-60-360-039-4701

US-09-444-050-28071

US-09-974-300-2022

US-60-360-039-31255

US-60-360-039-3178

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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              SOFTWARE: Patentin Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
BELICATION NUMBER: US/07/845,990
FILING DATE: 19920304
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ALIGNMENTS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ATTORNEY/AGENT INFORMATION:
NAME: HORN MS, MARGARET A
REGISTRATION NUMBER: 33,401
REFERENCE/DOCKET NUMBER: GC209-US1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     COUNTRY: U.S.A.
ZIP: 94080
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TELECOMMUNICATION INFORMATION:
TELEPHONE: 415-742-7336
TELEPAX: 415-742-7217
INFORMATION FOR SEQ ID NO: 1:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     SEQUENCE CHARACTERISTICS:
LENGTH: 3107 base pairs
TYPE: NUCLEIC ACID
STRANDEDNESS: double
TOPOLOGY: linear
     CLASSIFICATION:
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US-07-845-990-1
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Page 3

	RESULT 2 US-60-360-039-36590 ; Sequence 36590, Application US/60360039 ; GENERAL INFORMATION: ; APPLICANT: Cao, Yongwei ; APPLICANT: Chen, Yainfeng ; APPLICANT: Chen, Yainfeng	; APPLICANT: Hinkle, Gregory J. ; APPLICANT: Slater, Steven C. ; TITLE OF INVENTION: EXPRESSION OF MICROBIAL PROTEINS IN PLANTS FOR PRODUCTION OF ; TITLE OF INVENTION: PLANTS WITH IMPROVED PROPERTIES ; FILE REPERENCE: 38-10(5.052)ATH IMPROVED PROPERTIES ; CURENT APPLICATION NUMBER: US/60/360,039 ; CURRENT FILING DATE: 2002-02-21	; NUMBER OF SEQ ID NOS: 47374 ; SEQ ID NO 36590 ; LENGTH: 1739 ; TYPE: DNA ; ORGANISM: Aspergillus nidulans US-60-360-039-36590	Query Match Query Match Best Local Similarity 56.1%; Pred No. 3.4e-77; Matches 1035; Conservative 0; Mismatches 600; Indels 209; Gaps 7; Oy 615 CGACCCTACGGACCAGTTTCTTAGCAAGTTTACATTGACGATGAACAGTGCTAA 674	10 11 1 1 1 1 1 1 1	OY 735 CAACTCTACTTGAGGATTTTATCTTCCGCCAGAAGATCAACACTTTGATCATGAGAGGG 794	Db 281 TGAGTGAGGACTCTTCAATTGTCGATTGAA-ACGTTGGATGTGCGGGGGGTC 339 QY 855 CCTGAGCGCGCCCATCGAGGAGCTGGTGCCATGGCGTATTCACATCCATAAAT 914	QY 915 AACTGGTCGAATATCACAGCGCATCCTTCTTGAACGCGCAGGAAAGCAGCACACTA 974	Db	OY 1095 GTAGTCATACTCATAACAGCACAACAAATATGAATACAAACCCAGGACCTAGGCTGACTA 1154 Db 562561	QY 1155 CTCGGCAATGTAGATATCGTCGGAAACAACGTTCCAGTCTTCTTCATTCA
1510 GCGGAAAGAATCCCGACTTCCATCGACACCTCTGGGATGCCATTGAATCTGGAAGGT 1569	1630 GCTCTGTCGGTTGCTCTTTTCTATATCTTCAACTAAGACTGACT			1634 ACATATCTACTTCTGCAGTTCCAACCCGGTCGTTCTGCTGCATTGACTTCACCG 1693 1990 ATGACCTTTGCGTCGCTTGTACTCCTACCTTGACTTGAATTGAATCGCATG 2049			<u>ს</u> – ს _ ქ		დ — დ დ		2151 CGGTGCGTCCCCTTGGTCTCGGTCCCCCCCCCCCACCCGACTTACTACACCCCCCCC
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1632 GCTCCACCTTCGATGATGCTTGGTCGCAGCCCCGGCTTTTCTGGAACTCTTTTTCCG 1691
                                                                                                                                                                                             APPLICANT: Cao, Yongwel APPLICANT: Cao, Yongwel APPLICANT: Timberlake, William E. TITLE TIMBERLAKE, William E. TITLE OF INVENTION: ASPERGILLUS NIDULANS GENOME SEQUENCE AND USES THEREOF FILE REFERENCE: 38-10(15485)D CURRENT APPLICATION NUMBER: US/60/138,103 CURRENT PILING DATE: 1999-06-04 NUMBER OF SEQ ID NOS: 28006 SEQ ID NO 6172
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TATGTAGATACAAAATATGTGACCGTGTTGCAAATCCGCTAATTCAATTTTACGCAGGTT
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                                      Length 3594;
                                                                                      TCGAGAAGCAATTCCTCGTCAACGCCATGCGCTTCGAAAACTCC 2458
                                                                                                  CCGAGAAGCAGTTCGTGGTCAACGCCATTCGCTTCGCCACCGCC 1735
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                                                                                                                                                                                                                                                                                                                     ; ORGANISM: Aspergillus nidulans US-60-138-103-6172
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Best Local Similarity 56.1%;
Matches 1035; Conservative
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                CTCTTCTGGGCAATGTCAGGACATGGAATCCCTCGCTCAATGCGTCATGTTGATGGGTGG
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     CAATTCCCTGATTTGATTCACGCTGTCAAGCCGCAACCAGACAGTGAAATTCCCCAGGCT
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Qy 1155 CTCGGCAATGTAGATATCGTCGGAAACAACGTTCCAGTCTTCATTCA	1395 GGCGTCCATACCTTCGGCGTCGGGGGGGGGCGCGGGGGGGG	Db 277AACAACAACGTGACGGTGCTGGCCAGATGTTCATTCGGTGACCCCG 229 Qy 2235 CCGCATATACACCCAACTCAATGAGCAACGGATTCCCACAACAACGAACCGGACCCATA 2294

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	OY 2242 TACACCCAACTCAATGAGCAATCCCACAACAGACCGACCG	OY 2302 ATTCTCACCGCACCTGGGCGTATGGTAAATGGACCACTAGTGCGCGAGCTCAGCCCGAG 2361	OY 2362 CTTCAACGACGTCTGGTCCCAACGCGTCTCTTCTACAACTCACGGTCTTCGAGAA 2421	OY 2422 GCAATICTCGTCAACGCCATGCGCTTCGAAAACTCCCACGTGCGAGTGAAACGTGCG 2481	QY 2482 TAAGAACGTCATCATCCAGCTGAACGGCGTCGCCCGCGCGCG	OY 2542 AGCTATCGGCGTCGAACCCCGGACCCGAACCTTCTACCACAAGGCAACGT 2601	QY 2602 CCCCATCGGCACCACGAATCTCCTGCGGCTCGACGGGCTGAAATCGCCCTCCT 2661	Qy 2662GACAAGAGACGACGGTAGCTTCACGATCGCGGAGCAGCTCCGGGCCGCTTTAACAG 2718 Dh 1835 CTCCACACACACACACACACACACACACACACACACACA	2719	Db 1895 GGAGGGCCTCAAGGTCACCGTCATCGCCGAGTACCTTGCCAGCGGTGTCGACCAGACCTA 1954	OY 2779 GAACAIGACCTAITCCGGCGCCGACGGCTCGATCTTCGATGCCGTGATCGTCGGGGG 2838	OY 2839 CCTGCTCACGACGCCTCAACGCAATACCCAAGAGGTCGCCGCTCAGGATTAT 2892	QY 2893 TACGGATGCATACGCGTATGGAAAGCCCGTTGGCGCTCGGTGGCAATG 2948	RESULT 6 .US-09-404-520-28164		APPLICANT: APPLICANT:	; APPLICANT: MoIninch, James ; APPLICANT: Timberlake, William E. ; APPLICANT: Yu, Jaehyuk ; TITLE OF INVENTION: Emericella nidulans Genome Sequence and Uses Thereof	FILE REFERENCE: 38-10(15498)A CURRENT APPLICATION NUMBER: US/09/404,520	u.	ENGTH: 2152	US-09-404-520-28164
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1102 TACTCATAACAGCACAACAAATATGAATACAAACCCAGGACCTAGGCTGACTACTCGGCA 1161	1162 ATGTAGATATCGTCGGAAACAACGTTCCAGTCTTCTTCATTCA	AACTG 	CTICT	- 8	GAAGA 1	1462 CCCTCCAAGGAAGAGCGGCCTGGTATGGGAAGAGGCACAGGCTCTTGGCGGAAAGAATC 1521 	GTGGG ATGGG		1039 1039 1039 1039 1039 1038		1702 ATAGCTGGGCTTTCAATTGGTGAAGGAGAATCAATCCAAGTTTGATTTCGATCTATT 1761	ATGGT ATGAC		CCCTATATATTTGGAATATGAATACATGTATAGCTAGATGAAGCGTATATCTAAATATAT	1203 1202 1942 TTCCACAGTTCCAACCAGGTCATGTAGTTCGCGGAATCGATTTCACGGATGACCTTTGC 2001	CCTGC	2002 TTCAGGGCCGCTTGTACTCCTACCTTGACACTCAATTGAATCGCCATGGAGGTCCCAACT 2061 1	2062 TCGAGCAACTGCCGATCAGACCCCGCATCCCATTCCATAACAACAATGGGGACGGTG 2121		2122 CTGGTAAGCTACTTCTCACCTACCATGTCAACTTCCATCTTGACCCAATCGATTTGTATA 2181	2182 GAGTATTAACATCCCCGTCTGCACAGGACAAATGTTCATCCCTCTAAACACGGCCGGATA 2241
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642 GACCTCTGGCAAGAATCCTGACTTCATGCGTCAGGATTTGCACGATGCAATCGAGGCTGG 701
                                                                                      582 CAAATTTCACTGGAAGTCTTTGCAGGGCAAGGCCAGCATGGTCTGGGAAGAGGCCCAGCA
                                                                                                                                                   1325 ATTGCATGCCCTCTTCTGGCCATGTCAGGACATGGAATCCCTCGCTCAATGCGTCATGT
                                                                                                                                                                                                                                     1385 TGATGGGTGGGGCGTCCATACCTTCCGACTTGTCACCGACGAGGGCAACTCGACCTTGGT
                                                               APPLICANT: LAGACE, ROBERT E.
APPLICANT: CORLEY, NEIL C.
APPLICANT: RUSSO, FRANK D.
APPLICANT: HANN, AMY L.
APPLICANT: HEATH, JOE D.
APPLICANT: FINNEY, GREGORY L.
APPLICANT: FINNEY, GREGORY L.
APPLICANT: FINNEY, GREGORY L.
APPLICANT: BROOKS, JACQUELINE
TITLE OF INVENTION: UNCLEOTIDE SEQUENCES OF ASPERGILLUS FUMIGATUS
TITLE OF INVENTION: GROWE, FRAGMENTS THEREOF, AND USES THEREOF
CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1565 AAGGTACCCTGAGTGGGAGGTAAGATATGATTCCCCCAAATCA 1607
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC COMPATIBLE
COMPATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Word Perfect 6.1 for Windows/MS-DOS 6.2
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/60/082,300
FILING DATE: HEREWITH
CLASSIFICATION:
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NAME: CERRONE, MICHAEL C.
REGISTRATION NUMBER: 39.13.2
RELECOMMUNICATION INFORMATION:
TELECOMMUNICATION INFORMATION:
TELEPHONE: (650) 845-055
INFORMATION FOR SEQ ID NO: 9502:
SEQUENCE CHARACIERISTICS:
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STRANDEDNESS: double
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COMPUTER READABLE FORM:
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STREET: 317
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Sequence 19771, Application US/09417507

GENERAL INFORMATION:
GENERAL INFORMATION:
TITLE OF INVENTION: NUCLEIC ACID AND AMINO ACID SEQUENCES RELATING TO ASPERGILLUS
TITLE OF INVENTION: FUMIGATUS FOR DIAGNOSTICS AND THERAPEUTICS

FILLE REPRENCE: PATH99-10

CURRENT APPLICATION NUMBER: US/09/417,507

CURRENT FILING DATE: 1999-10-14

NUMBER OF SEQ ID NOS: 44312
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                                                             1822 GCGTGAACCAGACCTACCTGCTCTGACGCCATTCAGTTTGACGCCGTCGTTGTTGTCCC 1881
                                                                                                                          2835 GCGGCCTGCTCACGAGGCCCTCAACGCAATACCCAAGAGGTCGCCCGCTCAGGATTATTA 2894
                                                                                                                                                                     1882 CTGGAGCGGAGAAGCTCTTCGGTGCCAAGTCCGCGGCCAACTCCAGCTCAACCCTCTACC 1941
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Matches 508; Conservative
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US-09-417-507-19771
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                                                                                                                     Gaps
                                                                                                                     49;
                                                                   Length 828;
                                                                Query Match 7.4%; Score 286; DB 52; Length 8 Best Local Similarity 63.5%; Pred. No. 8.5e-53; Matches 512; Conservative 0; Mismatches 245; Indels
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US-60-082-300-9502
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Sequence 5719, Application US/09533559
GENERAL INFORMATION:
APPLICANT: Randy M. Berka
APPLICANT: Michael W. Rey
APPLICANT: Michael W. Rey
APPLICANT: Geffrey R. Shuster
APPLICANT: Sakari Kauppinen
APPLICANT: Lib Groth Clausen

US-09-533-559-5719

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                                                                                                                                                                                                                                                                                                                                                                                                                                                                      7.2%; Score 279.4; DB 20; Length 1186;
59.6%; Pred. No. 2.9e-51;
Live 0; Mismatches 262; Indels 148; Gaps
                                 Monitoring Multiple Gene
APPLICANT: Peter Bjarke Olsen
TITLE OF INVENTION: Methods For Monitoring Mitter Cof INVENTION: Expression
TITLE OF INVENTION: Expression
FILE REFERENCE: 5849.200-US
CURRENT APPLICATION NUMBER: US/09/533,559
CURRENT FILING DATE: 2000-03-22
EARLIER APPLICATION NUMBER: 09/273,623
EARLIER FILING DATE: 1999-03-22
NUMBER OF SEQ ID NOS: 7860
SEQ ID NO 5719
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; OTHER INFORMATION: n - A,T,C
US-09-533-559-5719
                                                                                                                                                                                                                                                                                                         ORGANISM: Aspergillus oryzae
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Best Local Similarity 59.6
Matches 604; Conservative
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.044 GCGACCCGTCTGTATACCGATGAAGGCAATTTTGGTAAGCATTATATGTGTGGTAGTCATA 1103
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                           984 ITITCTACAGTCGCTGGTAGCAGAGGCAGTGTTGACTCTGCTCGCGATATCCACGGATTT
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THEREOF
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APPLICANT: CORLEY, NEIL C.
APPLICANT: RUSSO, FRANK D.
APPLICANT: HOSSO, FRANK D.
APPLICANT: HANH, AMY L.
APPLICANT: HEATH, JOE D.
APPLICANT: FINNEY, GREGORY L.
APPLICANT: FINNEY, GREGORY L.
APPLICANT: BROOKS, JACQUELINE
TITLE OF INVENTION: UNCLEOTIDE SEQUENCES OF ASPERGILLUS FUMI
TITLE OF INVENTION: GENOME, FRAGMENTS THEREOF, AND USES THEF
NUMBER OF SEQUENCES: 21910
CORRESPONDENCE ADDRESS:
ADDRESSEE: INCYTE PHARMACEUTICALS, INC.
STREET: 3174 PORTER DRIVE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
OPERATING SYSTEM: PC-DOS/MS-DOS
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/60/082,300
                                                                                                                                                       Sequence 2192, Application US/60082300 GENERAL INFORMATION:
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MEDIUM TYPE: Floppy
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STATE: CALIFORNIA
COUNTRY: USA
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APPLICANT: SHAW, KAREN J.
APPLICANT: SHAW, KAREN J.
APPLICANT: SHAW, KAREN J.
APPLICANT: KESSLER, MARCO
APPLICANT: APPLICANT: ZENG, OIANDONG
APPLICANT: ZENG, OIANDONG
APPLICANT: GREENE, JONATHAN R.
TITLE OF INVENTION: ASPERGILLUS FUMIGATUS NUCLEIC ACIDS AND POLYPEPTIDES,
TITLE OF INVENTION: ASPERGILLUS FUMIGATUS NUCLEIC ACIDS AND POLYPEPTIDES,
TITLE OF INVENTION: ASPERGILLUS FUMIGATUS NUCLEIC ACIDS AND POLYPEPTIDES,
FILE REFERENCE: 2976-40200S1
CURRENT APPLICATION NUMBER: US/09/675,784A
PRIOR APPLICATION NUMBER: US/09/675,338
PRIOR PRILING DATE: 1999-09-29
NUMBER OF SEQ ID NOS: 13925
SEQ ID NO 1633
                                                    1411
                                                                                                            1412 ACTIGICACCGACGAGGGCAACTCGACCTTGGTCAAGTTTCGCTGGAAGACCCTCCAAGG 1471
                                                                                                                                                                          1472 AAGAGCGGGCCTGGTATGGGAAGAGGCACAGGCTCTTGGCGGAAAGAATCCCGACTTCCA 1531
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                                                                                                                                                                                                                                                          Score 259.8; DB 26; Length 1146;
Pred. No. 6.6e-47;
0; Mismatches 277; Indels 148;
                                                                                                                                                                                                                                                                                                                       RESULT 10
US-09-675-784A-1693
; Sequence 1693, Application US/09675784A
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; ORGANISM: Aspergillus fumigatus
US-09-675-784A-1693
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Query Match
Best Local Similarity 58.3%;
Matches 594; Conservative
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ACCGCACCTGGGCGTATGGTAAATGGACCACTAGTGCGCGAGCTCAGCCCGAGCTTCAAC 2368
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  CTCGTCAACGCCATGCGCTTCGAAAACTCCCACGTGCGGAGTGAAACCGTGCGTAAGAAC 2488
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               480 GICATCATCAGCTGAACCGCGTGTCCAACGACCTCGCCCCGCCGCCGTCGCGCTATC 539
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               240 AACACCCTCAACAAGGGCTCTCCTAAGCAGGCCAACCAGACTGTGGGCAAGGGCTTCTTC 299
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      300 ACGGCTCCTGGACGCGAGTCTACTGGCCGTTTCACCCGTGCCGTCAGCCCGTCTTCGAG 359
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2189 AACATCCCGTCTGCACAGGACAAATGTTCATCCCTCTAAACACGGCCGCATATACACCC
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                                                            2479 GCGTAAGAACGTCATCATCCAGCTGAACCGCGTCGACAACGACCTCGCCCG 2529
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                                                                                  AAAGAACAACGTCATCATTCAGTTGAACCGCATCGATAACGACCTTGCACG
                                                                                                                                                                                                                                                APPLICANT: Michael W. Berka
APPLICANT: Michael W. Rey
APPLICANT: Jeffrey R.Shuster
APPLICANT: Jefrey R.Shuster
APPLICANT: Ib Groth Clausen
APPLICANT: Peter Bjarke Olsen
TITLE OF INVENTION: Methods for Monitoring Multiple Gene
TITLE OF INVENTION: Expression
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         DB 20;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 0; Mismatches 243;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Score 240.2;
                                                                                                                                                                                                                                                                                                                                                                                                                  CURRENT APPLICATION UNMER: US/09/533,559
CURRENT FILING DATE: 2000-03-22
EARLIER APPLICATION NUMBER: 09/273,623
EARLIER FILING DATE: 1999-03-22
NUMBER OF SEQ ID NOS: 7860
SOFTWARE: FastSEQ for Windows Version 4.0
SEQ ID NO 5840
                                                                                                                                                                                                            ; Sequence 5840, Application US/09533559; GENERAL INFORMATION:
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Best Local Similarity 61.8%;
Matches 402; Conservative (
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ; TYPE: DNA
; ORGANISM: Aspergillus oryzae
US-09-533-559-5840
                                                                                                                                                                    RESULT 12
US-09-533-559-5840
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1699 CATATAGCTGGGCTTTCAATTGGTGAATGAAGCAGATCAATCCAAGTTTGATTTCGATCT 1758
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1879 ACCCCCTATATATTTGGAATATGAATACATGTATAGCTAGATGAAGCGTATATCTAAATA 1938
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1939 TATTTCCACACTTCCAACCAGGTCATGTAGTTCGCGGAATCGATTTCACGGATGACCCTT 1998
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1999 TGCTTCAGGGCCGCTTGTACTCCTACCTTGACACTCAATTGAATCGCCATGGAGGTCCCA 2058
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     2239 ATATACACCCAACTCAATGAGCAACGGATTCCCACAACAAGCCAACCGGACCCATAACAG 2298
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                232 TGGCTTCTTCACAGCTCCTGGACGTACCACGTGGCAAGCTTGTCCGTGCGGCGTCACCT 173
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    785 CAATCAGCTCGGTGTTCAAATCCATGGATGAGGAGGACCAATGCGGTTCGGTTTTGACCT 726
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ACTICGAGCAACTGCCGATCAACAGACCCCGCATCCCATTCCATAACAACAATCGCGACG
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       665 GCAACTGAACCGCAACTTTTGCTGAGACCGAAGTATGGTATG---
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                                                                                                                                                                                                                                                                                                                                                                                                                         Score 252.6; DB 52;
Pred. No. 2.4e-45;
0; Mismatches 284;
                                                   ALTORNEL TREACHION.

NAME: CERRONE, MICHAEL C.

REGISTRATION NUMBER: 39,132

REFERENCE/DOCKET NUMBER: PM-00014 P

TELECOMMUNICATION INFORMATION:

TELEPHONE: (650) 855-0555

TELEPHONE: (650) 855-0166

INFORMATION FOR SEQ ID NO: 2192:

SEQUENCE CHARACTERISTICS:

LENGHER: 800 base pairs

TENE: nucleic acid

STRANDEDNESS: double
                                                                                                                                                                                                                                                                                                                                                                                                                         6.5%;
                                                                                                                                                                                                                                                                                                              MOLECULE TYPE: genomic DNA
IMMEDIATE SOURCE:
CLONE: AFUIC2199
                                     ATTORNEY/AGENT INFORMATION:
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Matches 500; Conservative
HEREWITH
                                                                                                                                                                                                                                                                                               ctrcular
                 CLASSIFICATION:
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Sequence 19772, Application US/09417507
GENERAL INFORMATION:
APPLICANT: KEITH G. WEINSTOCK ET AL.
TITLE OF INVENTION: NUCLEIC ACID AND AMINO ACID SEQUENCES RELATING TO ASPERGILLUS
TITLE OF INVENTION: FUMIGATUS FOR DIAGNOSTICS AND THERAPEUTICS
CURRENT APPLICATION NUMBER: US/09/417,507
UNDER OF SEQ ID NOS: 44312
SEQ ID NO 19772
LENGTH: 522
                                                                                                                                                                        2205 CAGGACAANGTTCATCCCTCTAAACACGGCCGCATATACACCCAACTCAATGAGCAACG 2264
                                                                                                                                                                                                                                                     1946 ACAGITCCAACCAGGICAIGTAGITCGCGGAATCGAITTCACGGAIGACCCITIGCIICA 2005
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            2006 GGGCCGCTTGTACTCCTACCTTGACACTCAATTGAATCGCCATGGAGGTCCCAACTTCGA 2065
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      2325 TGGTAAATGGACCACTAGTGCGCGAGCTCAGCCGAGCTTCAACGACGTCTGGTCCAAC
                                                                                                                                                                                                                                                                                                                     137 CCACCAGTGGCAAGCTTGTCCGTGCGGTCAGCTCTAAGCTTTGAGGATGTCTGGTCTAGC
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                                                                                                                        Length
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Pred. No. 1.6e-33;
0; Mismatches 163; Indels
                                                                                                                                                    Indels
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Score 214.8; DB 18;
Pred. No. 5.3e-37;
0; Mismatches 152;
                                                                                                                   5.68;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Query Match 5.2%;
Best Local Similarity 63.9%;
Matches 331; Conservative
               44312
                                                                                                                              Best Local Similarity 66.8
Matches 306; Conservative
                                                     TYPE: DNA
CORGANISM: A.fumigatus
US-09-417-507-19769
              NOS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              : A.fumigatus
          NUMBER OF SEQ ID
SEQ ID NO 19769
LENGTH: 534
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                                                                                                                  Query Match
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                                                                                                                                                         Sequence 1977, Application US/09417507
Sequence 1977, Application US/09417507
Sequence 1977, Application US/09417507
SEQUENCE INFORMATION:
NUCLEIC ALL APPLICATION: NUCLEIC ACID AND AMINO ACID SEQUENCES RELATING TO ASPERGILLUS
TITLE OF INVENTION: FUMIGATION FOR DIAGNOSTICS AND THERAPEUTICS
FILE REPERENCE: PATH99-10
CURRENT APPLICATION NUMBER: US/09/417,507
CURRENT FILING DATE: 1999-10.14
NUMBER OF SEQ ID NOS: 44312
SEQ ID NO 19777
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GENERAL INFORMATION:
APPLICANT: KEITH G. WEINSTOCK ET AL.
TITLE OF INVENTION: NUCLEIC ACID AND AMINO ACID SEQUENCES RELATING TO ASPERGILLUS
FILE OF INVENTION: FUNIGATUS FOR DIAGNOSTICS AND THERAPEUTICS
FILE REFERENCE: PATH99-10
CURRENT APPLICATION NUMBER: US/09/417,507
CURRENT FILING DATE: 1999-10-14
2729 AAAGTAGATATCGTCCTAGTGGGCTCATCGCTTGATCCCCAACGCGGCGTGAACATGACC 2788
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                            720 GGCGITGAIGITGICGICGITG-----CGGAGCGICTGICCGAIGGCGITGAICAGACI 773
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Pred. No. 6.3e-42;
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al Similarity 72.4%;
307; Conservative (
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2126 TAAGCTACTICTCACCTACCATGTCAACTTCCATCTTGACCCAATCGATTTGTATAGAGT 2185
                                                             2186 ATTAACATCCCCGTCTGCACAGACAAATGTTCATCCCTCTAAACACGGCCGCATATACA 2245
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Search completed: June 12, 2003, 00:35:44 Job time : 8102 secs

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GenCore version 5.1.6
Copyright (c) 1993 - 2003 Compugen Ltd.
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US-08-695-987-1
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Sequence 2, Appli Sequence 44, Appl	Sequence 44, Appl Sequence 5, Appli Sequence 2, Appli	, , , , , , , , , , , , , , , , , , ,	1, 7 2, 4	Sequence 1, Appl1 Sequence 7, Appl1 Sequence 7, Appl1 Sequence 7, Appl1 Sequence 32, Appl1	Sequence 5, Appli
US-09-130-114-2 US-08-975-316-44	US-09-015-192A-44 US-09-434-288-5 US-09-103-840A-2	US-09-103-840A-1 US-08-858-003-1 US-09-078-166-1 US-08-957-467-1	US-09-105-537-1 US-09-197-649-7 US-09-372-422A-21	US-08-173-508-7 US-08-173-508-7 US-08-265-310-7 US-08-951-742-7 US-09-105-537-32	US-09-105-537-5
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ALIGNMENTS

MESURAL INFORMATION:

Sequence 6, Application US/07846181

Sequence 6, Application US/07846181

Sequence 6, Application US/07846181

SEREAL INFORMATION:

APPLICANT: BERKA, RANDY M
APPLICANT: REY, MICHAEL W
ITILE OF INVENTION: CATALASE-R

MUMBER OF SEQUENCES:

ADDRESSEE: GENENCOR INTERNATIONAL, INC.

STREET: 180 KIHBALL WAY

CITY: SOUTH SAN FRANCISCO

CONNITY: USA

CONNITY: USA

CONNITY: USA

CONNITY: SOUTH SAN FRANCISCO

COMPITER: IBM PC compatible

OPERATING STEER: PLOPPY disk

CONNITY: BADICATION DATA:

MEDIUM TYPE: IBM PC compatible

OPERATING STEER: 1992304

CLASSIFICATION DATA:

APPLICATION NUMBER: 03401

RELIEPHONE: HORN MAY, MARGARET A

REGISTRATION NUMBER: 33401

TELEPHONE: HORN MAY, MARGARET A

REGISTRATION NUMBER: 33401

TELEPHONE: HORN MAY, MARGARET A

REGISTRATION NUMBER: GC204-US1

TELEPHONE: ALS-742-7336

INFORMATION FOR SEQ ID NO: 6:

SEQUENCE CHARACTERISTICS:

LENGTH: 8533 base pairs

TYPE: NUCLEC ACID

TOLICATE AND SEC ID NO: 6:

SEQUENCE CHARACTERISTICS:

LENGTH: 8533 base pairs

TOLICATION FOR SEQ ID NO: 6:

SEQUENCE ALS-1217

TOLICATION FOR SEQ ID NO: 6:

TOLICATION FOR SEQ ID NO: 6:

SEQUENCE ALS-1217

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SEQUENCE ALS-1217

TOLICATION FOR SEQ ID NO: 6:

TOLICATION FOR SEQ ID NO: 6:

SEQUENCE ALS-1217

TOLICATION F

1985 TRIGITORING CONTROLL

ACAAGGCAACCGTCCCCATCGGCACCTTC 2617 ACACGGCCGCATATACACCCAACTCAATG 2257 AGCTCAGCCCGAGCTTCAACGACGTCTGG 2377 GCCGCGTCGCGCTAGCTATCGCGTCGAA 2557 ACGITITACICATATAGCIGGCTITCAA 1717 FGGTTGGTCCACCCCTATATATTTGGAA 1897 SATGACCCTTTGCTTCAGGGCCGCTTGTA 2017 ATCGATTTGTATAGAGTATTAACATCCCC 2197 3452 CGGTCTTCGAGAAGCAATTCCTCGTCAAC 2437 TCCCCGCTGAGCAGCAGGTTGTCAAC 3688 PATCTAAATATATTTCCACAGTTCCAACC 1957 AATCGCGACGGTGCTGGTAAGCTACTTCT 2137 GCTCTGTCGGTTGCTTTTCGTCTTTT 1657 AAATCGCCCTCCTGAC 2664 AGGTCGCCTTCCTGGC 3915

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                                                                                                                                                                                                              1058 TACCGATGAAGGCAATTTTGGTAAGCATTATATCGTGGTAGTCATACTCATAACAGCACA 1117
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                                                                                                         CATITCITGAGIGCCAACGATAAGGAGACCCCTAIGITCIGICCTICICIACTGIGGT
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2279 GTAACAATAAATTGACCCAGTGGTTTTCAATTAGGTCCCCGAGCGCGTCGTCCACGCCG
                                                938 ATCCTTCTTGAACGCGGCAGGAAAGCAGACACCAGTATTCGTGCGGTTTTCTACAGTCGC
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                              878 AGGAGCTGCTCCATGGCGTATTCACATCCTATAATAACTGGTCGAATATCACAGCCGC
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                              Sequence 6, Application US/07845989;
Patent No. 5360901
GENERAL INPORMATION:
APPLICANT: BERKA, TIMOTHY
APPLICANT: FOWLER, TIMOTHY
TITLE OF INVENTION: PRODUCTION OF ASPERGILLUS NIGER
TITLE OF INVENTION: CAPALASE-R
NUMBER OF SEQUENCES: 9
CORRESPONDENCE ADDRESS:
ADDRESSED: GENENCOR INTERNATIONAL, INC.
STREET: 180 KIMBALL WAY
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Score 442.2; DB 1;
Pred. No. 1.2e-106;
0; Mismatches 778;
                                                                                                                                                                                                                                                                                            MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/07/845,989
FILING DATE: 1920304
                                                                                                                                                                 STREET: 180 KIMBALL WAY
CITY: SOUTH SAN FRANCISCO
STATE: CA
                                                                                                                                                                                                                                                                                                                                                                                                     CLASSIFICATION: 435
ATORNEY/ACENT INFORMATION:
NAME: HORN MS, MARGARET A
REGISTRATION NUMBER: 33401
REFERENCE/DOCKET NUMBER: GC208-US1
TELECOMMUNICATION INFORMATION:
TELEPHONE: 415-742-7536
INFORMATION FOR SEQ ID NO: 6:
SEQUENCE CHARACTERISTICS:
LENGTH: 8533 base pairs
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Best Local Similarity 54.8%;
Matches 1209; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           : 8533 base pairs
NUCLEIC ACID
EDNESS: double
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COMPOTER READABLE FORM:
MEDIUM TYPE: Floppy di
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                                                                                                                                                                                                                                                       USA
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         US-07-845-989-6
         RESULT 2
US-07-845-989-6
                                                                                                                                                                                                                                                       COUNTRY:
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                                                                                                                                                                                                                                                                                                                              11.4%; Score 439; DB 1; Length 3107; 54.9%; Pred. No. 5.3e-106; Live 0; Mismatches 760; Indels 220;
                                                                                                                                                                                                                                                                        join(327..620, 683..907, 969..1385, 1440..1604,
1654..2745)
                                                                                                     GC204-US1
                   US/07/846,181
                                                                ALLONGE FREE TAGESTATION NUMBER: 33401
REGISTRATION NUMBER: 33401
REFERENCE/DOCKET NUMBER: GC2(
TELEPHONE: 415-742-7536
TELEPHONE: 415-742-7217
INPORMATION FOR SEQ ID NO: 4: SEQUENCE CHARACTERISTICS:
LENGTH: 3107 DASE PAIRS
                                         CLASSIFICATION: 435
ATTORNEY/AGENT INFORMATION:
NAME: HORN MS, MARGARET
CURRENT APPLICATION DATA:
                             19920304
                                                                                                                                                                                                                                                                                                                                                          Conservative
                                                                                                                                                                                               NUCLEIC ACID
FDNESS: double
                APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                            Best_Local Similarity
Matches 1195; Conserva
                                                                                                                                                                                                                                linear
                               FILING DATE:
                                                                                                                                                                                                  TYPE: NUCLE STRANDEDNESS
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FEATURE:
                                                                                                                                                                                                                                                                     ; LOCATION:
; LOCATION:
US-07-846-181-4
                                                                                                                                                                                                                                                           NAME/KEY:
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    AGGICAIGIAGIICGCGGAAICGAIITCACGGAIGACCCIIIGCIICAGGGCCGCIIGIA
                      CTCCTACCTTGACACTCAATTGAATCGCCATGGAGGTCCCAACTTCGAGCAACTGCCGAT
                                                                            CACCTACCATGTCAACTTCCATCTTGACCCAATCGATTTGTATAGAGTATTAACATCCCC
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Patentin Release #1.0, Version #1.25
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Sequence 4, Application US/07846181
Sequence 4, Application US/07846181
Sequence 4, Application US/07846181
Sequence 4, Application US/07846181
September 5360732
September 6, September 7, Thorner 1, Applicant: Rey, MICHAEL W
TITLE OF INVENTION: PRODUCTION OF ASPERGIL!
TITLE OF INVENTION: CATALASE-R
NUMBER OF SEQUENCES: 9
CORRESPONDENCE ADDRESS:
ADDRESSEE: GENEROCR INTERNATIONAL, INC.
STREET: 180 KIMBALL WAY
CITY: SOUTH SAN FRANCISCO
STREET: CA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ZIP: 94080
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-
SOFTWARE: Patentin Release #
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US-07-846-181-4
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join(327..620, 683..907, 969..1385, 1440..1604,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             APPLICANT: BERKA, RANDY M
APPLICANT: FOWLER, TIMOTHY
APPLICANT: REY, MICHAEL W
TITLE OF INVENTION: PRODUCTION OF ASPERGILLUS NIGER
NUMBER OF SEQUENCES: 9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ZIP: 94080
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/07/845,989
FILING DATE: 19920304
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              SSEE: GENENCOR INTERNATIONAL, INC. F: 180 KIMBALL WAY SOUTH SAN FRANCISCO
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Patent No. 5360901
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REGISTRATION NUMBER: 33401
REFERENCE/DOCKET NUMBER: GC2(TELECOMMUNICATION INFORMATION: TELECHONE: 415-742-7536
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LENGTH: 3107 base pairs
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INFORMATION FOR SEQ ID NO:
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STRANDEDNESS: double
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                                                                     ATGTCAGGGGAGATGCCTAGCGGTCAGAAAGGCCCCCTCGATCGCCGCCATGACACTCTC
                                                                              TCCGACCCTACGGACCAGTTTCTTAGCAAGTTTTACATTGACGATGAACAGTCGGTGCTA
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                    Score 439; DB 1; Length 3107;
Pred. No. 5.3e-106;
0; Mismatches 760; Indels 220;
                  Ouery Match
11.4%;
Best Local Similarity 54.9%;
Matches 1195; Conservative
1654..2745)
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1311 GAGTCTAGTCTGGGAAGAGGCGCAGGTTCTTCTGGCAAGAATGCCGACTTCCACCGTCA 1370
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                                                                      849 CAGGTTCCTGAGCGCGCCGTCCATGCTCGAGGAGCTGGTGCCCATGGCGTATTCACATCC
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                                    Indels 129;
Length 2794;
 6.5%; Score 249.2; DB 1;
48.0%; Pred. No. 7e-56;
iive 0; Mismatches 1048;
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                      Best Local Similarity 48.0
Matches 1087; Conservative
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                      2211 CAACAAGACCTCCAACGTCGGTACCTTCGGCAAGCCCTCCTCAGCATCGAGGGTCTGCA 2270
                                                                                                                                                                                                                                                                                                                    CORRESPONDENCE ADDRESS:
ADDRESSEE: No. 56460250 No. 5646025disk of No. 5646025th America, Inc. STREET: 405 Lexington Avenue, 64th Floor
       2590 CAAGGCAACCGTCCCCATCGGCACCTTCGGCACGAATCTCCTGCGGCTCGACGGCTGAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Join(1..282, 414..617, 697..717, 794..955, 1109
..1165, 1219..1788, 1843..2670, 2765..2791)
                                                                                                                                                                                                                                                                                                                                                                                                                                                       SOFTWARE: Patentin Release #1.0, Version #1.30 CURRENT APPLICATION DATA: APPLICATION NUMBER: US/08/435,925C FILING DATE: 05-MAY-1995 ATTONEY/AGENT TITLE ATTONEY/AGENT TITLE ATTONEY/AGENT TITLE ATTONEY/AGENT TITLE ATTONEY
                                                                                                                                                                                                                                                 APPLICANT: MOYEL, Donna
TITLE OF INVENTION: SCYTALIDUM CATALASE GENE
NUMBER OF SEQUENCES: 18
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 4429.000-US
                                                                                                                                                                                                       Sequence 1, Application US/08435925C
Patent No. 5646025
                                                                                                                                                                                                                                                                                                                                                                                                          COUNTRY: USA
ZIP: 10174-6401
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DO
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ATTORNEY/AGENT INFORMATION:
NAME: Lambirs, Elas J.
REGISTRATION NUMBER: 33,728
REFERENCE/POCKET NUMBER: 4429
TELECOMUNICATION INFORMATION:
TELEPHONE: 212-867-0123
TELEPHONE: 212-878-9655
                                                                                               2271 GGTCGGCTTCCTGGC 2285
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TYPE: nucleic acid
STRANDEDNESS: single
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1789..1842
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US-08-435-925C-1
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Best Local Similarity
Matches 257; Conserv
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US-09-027-166-10
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ZIP: 60606
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                      1425 CCAGATTGTCGATGAGTCCCAGGCGCAAGCCTTTGGCTTCGACTTGCTGGACCCGACAAA 1484
                                                                   GATCATCCCCGAGGAGTACGCCCCTTGACGAGCTGGGCCTCTTGAAGCTGGATCGCAA 1544
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                                                                                           1924 GCGTATATCTAAATATATTTCCAC-----AGTTCCAACCAGGTCATGTAGGTCG
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                                                                                                           CGGAATCGATTTCACGGATGACCCTTTGCTTCAGGGCCGCTTGTACTCCTACCTTGACAC
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Preparing CCCGTTGGCGCCGTCGGTGACGGTAGCAATGAAGCCCTTCGTGACGTCCTTATGGCCGCT 2977 2533 cceircererereregeaagreeaegreeaegreereregarecegegeargreegaa 2592 ö For Gaps Sequence 10, Application US/09027166

Patent No. 602721
GENERAL INFORMATION:
APPLICANT: CHANG, Li-Yen Edward
APPLICANT: CHANG, Ching-Long
APPLICANT: HWONG, Ching-Long
APPLICANT: LO, Cheng-Kai
TITLE OF INVENTION: No. 602721el Catalase, The Gene Thereof and
TITLE OF INVENTION: Catalase Using Genetic Engineering Technology
NUMBER OF SEQUENCES:
ADDRESSEE: McDonnell Boehnen Hulbert & Berghoff
STREET: 300 S. Wacker Drive Suite 3200 ö Length 3466; GGTGGGGATGCGTCGAATGGGCTGGACCAGCCCGGTGTGTATAT 3021 2593 GACGGGGACGGGGTGTATTCGGAGGAGTCGGTGGACATGTTTGT 2636 Indels ZIP: 66066
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
APPLICATION NUMBER: U\$/09/027,166
ELLING DATE: 20-FEB-1998
CLASSIFICATION NATA:
APPLICATION NUMBER: TW 8610018
FILING DATE: 03-JAN-1997
PRIOR APPLICATION NUMBER: W97120386.5
FILING DATE: 11-DEC-1997
ATOREST NUMBER: 37,293
REFIRENCE/DOCKET NUMBER: 37,293
REFIRENCE/DOCKET NUMBER: 37,293
REFIRENCE/DOCKET NUMBER: 37,293
REFIRENCE/DOCKET NUMBER: 98,180
TELECOMMUNICATION INFORMATION:
TELEPHONE: (312) 913-0001
TELECOMMUNICATION INFORMATION:
TELEPHONE: (312) 913-0002
TELECOMMUNICATION INFORMATION:
TELEPHONE: (312) 913-0002
TELECOMMUNICATION INFORMATION:
TELEPHONE: (312) 913-0002
TELEPHONE: (312) 913-0002 4.0%; Score 156.2; DB 3; 60.5%; Pred. No. 2.9e-31; 11ve 0; Mismatches 168; 1460 g

Gaps

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1458 AAGACCCTCCAAGGAAGAGCGGGCCTGGTATGGGAAGAGGCACAGGCTCTTGGCGAAAG 1517
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                                                                                                                                                                                                                                                                                                                                                                        APPLICANT: DOLLOL, Adrian
LEE, Adrian
RADGLIF, Flona J.
HAZELL, Stuart L.
TITLE OF INVENTION: TREATMENT AND PREVENTION OF HELIOBACTER
INFECTION
                                                                                                                            12;
                                                                                           Length 1518;
                                                                                        Score 88.2; · DB 3; Length 15
Pred. No. 1.8e-13;
0; Mismatches 193; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            COMPUTER: IBM PC Compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CORRESPONDENCE ADDRESS:
ADDRESSEE: Foley & Lardner
STREET: 3000 K Street, N.W., Suite 500
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       APPLICATION NUMBER: US/09/421,238
FILING DATE: 20-Oct-1999
CLASSIFICATION: UNKnown>
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/695,987
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Sequence 1, Application US/09421238
Patent No. 6468545
GENERAL INFORMATION:
APPLICANT: DOIDGE, Christopher
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ZIP: 20007-5109
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
                                                                                             Query Match 2.3%;
Best Local Similarity 52.4%;
Matches 226; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           CITY: Washington
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                                mat_peptide
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1..1515
 LOCATION:
FEATURE:
                                                  ; LOCATION:
US-08-695-987-1
                                NAME/KEY:
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US-09-421-238-1
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                                                                                                                                                                                                                                    1398 GICCATACCITCCGACTIGICACCGACGAGGGCAACTCGACCTIGGICAAGTTICGCTGG 1457
                   1278 ACTGCACATGATACGGCATGGGATTTCCTCAGCCAGCAGCCCAGCTCATTGCATGCCTC 1337
                                         1518 AATCCCGACTTCCATCGACAAGACCTCTGGGATGCCATTGAATCTGGAAGGTACCCTGAG
                                                                                    APPLICANT: LEE, Adrian
APPLICANT: RACLIFF, Flona J.
APPLICANT: HAZELL, SLUATT L.
APPLICANT: HAZELL, SLUATT L.
TITLE OF INVENTION: TREATHENT AND PREVENTION OF HELIOBACTER
TITLE OF INVENTION: INFECTION
NUMBER OF SEQUENCES: 6
CORRESPONDENCE ADDRESS: 6
ADDRESSEE: FOLGY & Lardner
STREET: 3000 K Street, N.W., Suite 500
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              COMPUTER READABLE FORM:
MEDIUW TYPE: Floppy disk
COMPUTER: IBM PC COMPATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PATEMET Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/695,987
FILING DATE: 15-AUG-1996
AMERICANNIN: 424
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NAME: BENY, Stephen A.
REGISTRATION NUMBER: 29,768
REFERENCE/DOCKET NUMBER: 1722
TELECOMMUNICATION INFORMATION:
TELEPHONE: (202)672-5300
TELEPHONE: (202)672-5300
                                                                                                                                                                                                                                                                                                                                                                                                                                                              Sequence 1, Application US/08695987
Patent No. 6005090
GENERAL INFORMATION:
APPLICANT: DOIDGE, Christopher
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ORGANISM: Heliobacter pylori
STRAIN: HP 921023
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INFORMATION FOR SEQ ID NO: 1:
SEQUENCE CHARACTERISTICS:
LENGTH: 1518 base pairs
TYPE: nucleic acid
STRANDEDNESS: single
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CITY: Washi
STATE: D.C.
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US-08-695-987-1
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1218 TICCCIGATITGATICACGCIGICAAGCCGCAACCAGACAGIGAAATICCCCAGGCIGCA 1277
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Query Match 2.2%; Score 86.6; DB 3; Length 1518; Best Local Similarity 52.2%; Pred. No. 4.7e-13; Matches 225; Conservative 0; Mismatches 194; Indels 12
              TREATMENT AND PREVENTION OF HELIOBACTER INFECTION
                                                                                                                                                                                                                                                             SOFTWARE: Patentin Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/695,987
FILING DATE: 15-40G-1996
CLASSIFICATION: 424
ATTORREY/AGENT INFORMATION:
NAME: BENT, Stephen A.
REGISTRATION NUMBER: 29,768
REGISTRATION NUMBER: 29,768
TELECOMMUNICATION INFORMATION:
                                                                                                     STREET: 3000 K Street, N.W., Suite 500 CITY: Washington STATE: D.C.
                                                                                                                                          STAIL:
COUNTY: USA
ZIF: 20007-5109
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
"WHITER: IBW PC COMPATIBLE
"COUPIN FORM: PC-DOS/MS-DOS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Heliobacter pylori
                                                                                        Foley & Lardner
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TELEX: 904136
INFORMATION FOR SEQ ID NO: 3:
SEQUENCE CHARACTERISTICS:
LENGTH: 1518 base pairs
TYPE: nucleic acid
STRANDEDNESS: single
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          mat_peptide
1..1515
                                                   NUMBER OF SEQUENCES: 6
CORRESPONDENCE ADDRESS:
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                                                                                    ADDRESSEE:
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LOCATION:
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US-08-695-987-3
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Length 1518;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Query Match
2.3%; Score 88.2; DB 4;
Best Local Similarity 52.4%; Pred. No. 1.8e-13;
Matches 226; Conservative 0; Mismatches 193;
ATTORNEY/AGENT INFORMATOR STEPHEN A.
NAME: BENT, Stephen A.
RECISTRATION NUMBER: 29,768
REFERENCE/DOCKET NUMBER: 17227/128
TELECOMMUNICATION INFORMATION:
TELEPHONE: (202)672-5399
TELEFAX: (126)672-5399
                                                                                                                                                                                                                                                                                                                                                                                                         LOCATION: 1.1515
SEQUENCE DESCRIPTION: SEQ ID NO: 1:
                                                                                                                                                                                                                                                                                 ORGANISM: Heliobacter pylori
                                                                                                                                                     INFORMATION FOR SEQ ID NO: 1:
SEQUENCE CHARACTERISTICS:
LENGHH: 1518 base pairs
TYPE: nucleic acid
TYPE: nucleic acid
STRANDEDNESS: single
                                                                                                                                                                                                                                                                                                                                                                                            mat_peptide
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Patent No. 6005090
GENEZI INFORMATION:
APPLICANT: DOINCE, Christopher
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RADCLIFF, Flona J.
HAZELL, Stuart L.
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                                                                                                                                                                                                                                                                                                     STRAIN: HP 921023
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LOCATION:
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                                                                                                                                                                                                                                                                                                                                                                        FEATURE:
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APPLICANT:
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1458 AAGACCCTCCAAGGAAGAGCGGGCCTGGTATGGGAAGAGGCACAGGCTCTTGGCGGAAAG 1517
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                                                                                                                                                                                                                     1398 GICCATACCTICCGACTIGICACCGACGAGGGCAACICGACCTIGGICAAGTITCGCIGG 1457
                                                                     1278 ACTGCACATGATACGGCATGGGATTTCCTCAGCCAGCAGCCCAGCTCATTGCATGCCTC 1337
TICCCIGATITIGATICACGCTGTCAAGCCGCAACCAGACAGTGAAATICCCCAGGCTGCA 1277
                                                                                                                                                                                                                                            652 CACACCATGCAAGGCGTTAAGCACTTGACTAACGAAGAAGCCGCAGAAGTCAGAAAATAT 711
                                                                                                    478 -----CACGACATGGTATGGGATTTTTGGAGTAATGTTCCTGAAAGCTTGTATCAAGTA
                                                                                                                                                 E: DIKE, BRONSTEIN, ROBERTS & CUSMAN, LLP
130 Water Street
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            GENERAL INFORMATION:
APPLICANT: SUGITAMA, Tosiro
APPLICANT: KAWABATA, Tomohisa
APPLICANT: HIRAYASU, KAZUNATI
APPLICANT: TANAKA, Takumi
TITLE OF INVENTION: POLYPEPTIDES, THEIR PRODUCTION
NUMBER OF SEQUENCES: 6
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            COMPUTER: 12th COMPUTER: 200 SOFTWARE: FastSEQ for Windows Version 2.0 CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/657,868B FILING DATE: 31-MAY-1996 CLASSIFICATION: 435 PRIOR APPLICATION 1435 PRIOR APPLICATION UNMBER: 136465 FILING DATE: 02-UNN-1995 APPLICATION NUMBER: 183512
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Sequence 2, Application US/08657868B Patent No. 6080556
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            34,235
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TELECOMMUNICATION INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     INFORMATION FOR SEQ ID NO: 2: SEQUENCE CHARACTERISTICS: LENGTH: 1803 base pairs
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                FILING DATE: 05-APR-1996
ATTORREY/AGENT INFORMATION:
NAME: RESNICK, David S
REGISTRATION NUMBER: 34,2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               MEDIUM TYPE: Diskette
COMPUTER: IBM Compatible
                                                                                                                                                                                                                                                                                                                                                                                                                                               1578 TGGGAGGTAAG 1588
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TELEFAX: 617-523-6440
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  772 TGGAAATTAAG 782
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                CORRESPONDENCE ADDRESS:
ADDRESSEE: DIKE, BRO
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           USA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CITY: Boston STATE: MA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ZIP: 02109
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US-08-657-868B-2
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       1218
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                                                                                                                                                                                                                                                                                     RADCLIFF, Flona J.
HAZELL, Stuart L.
TITLE OF INVENTION: TREATHENT AND PREVENTION OF HELIOBACTER
INFECTION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Length 1518;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   COUNTER TEADABLE FORM:
AED 2007-5109
COMPUTER READABLE FORM:
MEDIUM TYPE: FLOPPY disk
COMPUTER: 1BM PC compatible
COMPUTER: 1BM PC compatible
COMPATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/09/421,238
FILING DATE: 20-Oct-1999
CLASSIFICATION: <UNknown>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Match
Local Similarity 52.2%; Score 86.6; DB 4; Length 1:
Local Similarity 52.2%; Pred. No. 4.7e-13;
Les 225; Conservative 0; Mismatches 194; Indels
                                                                                                                                                                                                                                                                                                                                                                              CORRESPONDENCE ADDRESS:
ADDRESSEE: Foley & Lardner
STREET: 3000 K Street, N.W., Suite 500
CITY: Washington
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ATTORNEY/AGENT INFORMATION:
NAME: BENT, Stephen A.
REGISTRATION NUMBER: 29,768
REFERENCE/DOCKET NUMBER: 1722/128
TELECHMUNICATION INFORMATION:
TELEPHONE: (202)672-5399
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        APPLICATION DATA:
APPLICATION NUMBER: US 08/695,987
FILING DATE: 15-AUG-1996
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  EQUENCE DESCRIPTION: 3: US-09-421-238-3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ORIGINAL SOURCE:
ORGANISM: Heliobacter pylori
                                                                                                                                                                                           Sequence 3, Application US/09421238
Sequence 3, 6468545
GENERAL INCORMATION:
APPLICANT: DOIDGE, Christopher V.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                INFORMATION FOR SEC ID NO: 3:
SEQUENCE CHARACTERISTICS:
LENGTH: 1518 base pairs
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          NAME/KEY: mat_peptide
LOCATION: 1..1515
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TYPE: nucleic acid
STRANDEDNESS: single
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1..1515
                                                                                                                                                                                                                                                                       LEE, Adrian
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ropology: linear
                                                                 1578 TGGGAGGTAAG 1588
                                                                                                                                                                                                                                                                                                                                                                SEQUENCES:
                                                                                                    772 TGGAAATTAAG 782
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                                                                                                                                                                                                                                                                                                                                                                NUMBER OF
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Best Local S:
Matches 225
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                                                                                                                                                              RESULT 10
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1218 TICCCIGATITGATICACGCIGICAAGCCGCAACCAGACAGIGAAATICCCCAGGCTGCA 1277
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Pred. No. 1.4e-12;
0; Mismatches 195; Indels 12;
                                                                 PRIOR APPLICATION DATA:
APPLICATION NUMBER: 136465
FILING DATE: 02-001-1995
APPLICATION NUMBER: 83512
FILING DATE: 05-APR-1996
ATTORNEY/AGENT INFORMATION:
NAME: RESISTRATION NUMBER: 34,235
REGISTRATION NUMBER: 4652
TELECOMMUNICATION INFORMATION:
TELECOMMUNICATION INFORMATION:
TELECHONE: 617-523-3400
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Sequence 6, Application US/09027166
Patent No. 6022721
GENERAL INFORMATION:
APPLICANT: CHANG, Li-Yen Edward
APPLICANT: HWONG, Ching-Long
APPLICANT: LO, Cheng-Kai
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  NAME/KEY: Coding Sequence
LOCATION: 21...1535
OTHER INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    2.2%;
                          31-MAY-1996
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TOPOLOGY: linear
MOLECULE TYPE: Genomic DNA
FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                            INFORMATION FOR SEQ ID NO: 1
SEQUENCE CHARACTERISTICS:
LENGTH: 1829 base pairs
TYPE: nucleic acid
STRANDEDNESS: double
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Query Match
Best Local Similarity 52.07
Matches 224; Conservative
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                                               CLASSIFICATION:
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                                                                                                                                                                                                                                                                                                                                                   12;
                                                                                                                                                                                                                                                                                          Length 1803;
                                                                                                                                                                                                                                                                           Query Match
2.2%; Score 85; DB 3; Length 1803
Best Local Similarity 52.0%; Pred. No. 1.3e-12;
Matches 224; Conservative 0; Mismatches 195; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Sequence 1, Application US/08657868B
Patent No. 6080556
GENERAL INFORMATION:
APPLICANT: SUGIYAMA, TOSITO
APPLICANT: KAWABATA, TOMOHISA
APPLICANT: TANNAA, TOWNATI
APPLICANT: TANNAA, TOWNAMA, TOWNAMAA, TOWNAMAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ADDRESSEE: DIKE, BRONSTEIN, ROBERTS & CUSMAN, LLP
STREET: 130 Water Street
CITY: Boston
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            COMPUTER: IBM Compatible
OPERATING SYSTEM: DOS
SOFTWARE: FSSISSED for Windows Version 2.0'
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/657,868B
                                                                                                                                  ; NAME/KEY: Coding Sequence
; LOCATION: 4...1518
CTHER INFORMATION:
US-08-657-6688-2
                                               TOPOLOGY: linear
MOLECULE TYPE: Genomic DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1578 TGGGAGGTAAG 1588
                             double
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COMPUTER READABLE FORM:
MEDIUM TYPE: Diskett
nucleic acid
              STRANDEDNESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          USA
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STATE:
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1218 TICCCIGATITGAITCACGCIGICAAGCCGCAACCAGACAGTGAAAITCCCCAGGCIGCA 1277
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                                                                                                                                                                                                                                                         ADDRESSEE: DIKE, BRONSTEIN, ROBERTS & CUSMAN, LLP
STREET: 130 Water Street
CITY: Boston
STATE: MA
                                                                                                APPLICANT: SUGIYAMA, TOSITO
APPLICANT: KAWABATA, Tomohisa
APPLICANT: HIRAYASU, Kazunari
APPLICANT: TANAKA, Takuni
TITLE OF INVENTION: POLYPEPTIDES, THEIR PRODUCTION
TITLE OF INVENTION: AND USE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Score 81.8; DB 3;
Pred. No. 9.4e-12;
0; Mismatches 197;
                                                                                                                                                                                                                                                                                                                                                                                                                                            OPERATING SYSTEM: DOS
SOPTWARE: FastSEQ for Windows Version 2.0
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/657,868B
FILING DATE: 31-MAY-1996
                              Sequence 3, Application US/08657868B
Patent No. 6080556
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              FILING DATE: 31-MAY-1996
CLASCHICATION: 435
PRIOR APPLICATION 10435
PRIOR APPLICATION NUMBER: 136465
FILING DATE: 02-JUN-1995
APPLICATION NUMBER: 13512
FILING DATE: 05-APR-1996
ATTORNEY/AGENT INFORMATION:
NAME: RESISTATION NUMBER: 34,235
REFERENCE/DOCKET NUMBER: 4652
TELECHONE: 617-523-3400
TELECHONE: 617-523-3400
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ilarity 51.5%;
Conservative (
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           NAME/KEY: Coding Sequence LOCATION: 4...1518
OTHER INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              MOLECULE TYPE: Genomic DNA FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                    COMPUTER READABLE FORM:
MEDIUM TYPE: Diskette
COMPUTER: IBM Compatible
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            INFORMATION FOR SEQ ID NO: 3
SEQUENCE CHARACTERISTICS:
LENGTH: 1810 base pairs
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TYPE: nucleic acid
STRANDEDNESS: double
                                                                                                                                                                                                                         NUMBER OF SEQUENCES: 6
CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Best Local Similarity
Matches 222; Conserv
                                                                                                                                                                                                                                                                                                                                                                     02109
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                                                                                                                                                                                                                                                                                                                                                    COUNTRY:
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No. 6022721el Catalase, The Gene Thereof and Composition Comprising The Same, And Process For Preparing Catalase Using Genetic Engineering Technology
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       895 GCGTATICACATCCTATAATAACTGGTCGAATAICACAGCCGCATCCTTGTGAACGCGG 954
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                                                                    NUMBER OF SEQUENCES: 10
CORRESPONDENCE ADDRESS:
ADDRESSEE: ADDRESSEE: ADDRESSEE: ADDRESSEE: ADDRESSEE: 300 S. Wacker Drive Suite 3200
                                                                                                                                                                                                                                COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
COMPUTER: SYTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                      CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/09/027,166
FILING DATE: 20-FEB-1998
CLASSIFICATION: 435
PROR APPLICATION DATA:
APPLICATION NUMBER: TW 86100018
FILING DATE: 03-JAN-1997
PROR APPLICATION NUMBER: CN 97120386.5
FILING DATE: 11-DEC-1997
ATTORNEY/AGENT INFORMATION:
NAME: CHAO, MATK
REGISTRATION NUMBER: 37,293
REFERENCE/DCOKET NUMBER: 98,180
TELECOMMUNICATION INFORMATION:
TELEPAX: (312) 913-0001
TELEFRX: (314) 945-001
TELEFRX: (314) 945-001
TELEFRX: 01449 base pairs
TYPE: nucleic acid
STRANDEDESS: single
TOPPOLOGY: not relevant
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STATE: IL
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; LOCATION:
US-09-027-166-6
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1398 GTCCATACCTTCCGACTTGTCACCGACGAGGGCAACTCGACCTTGGTCAAGTTTCGCTGG 1457
                                                                   1458 AAGACCTCCAAGGAAGAGCGGGCCTGGTATGGGAAGAGGCACAGGCTCTTGGCGGAAAG 1517
                                                                                                                                     .518 AATCCCGACTTCCATCGACAAGACCTCTGGGATGCCATTGAATCTGGAAGGTACCCTGAG 1577
                     655 TTAACCATGCAAGGCGTTAAGCACTTGACTAATGAAGAAGCTGCAGAAATCAGAAAGCAT 714
                                                                                                                                                                1218 TICCCTGATITGATICACGCTGICAAGCCGCAACCAGACAGTGAAATICCCCAGGCTGCA 1277
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                                                                                                                                                                                                                                                                                                                         Sequence 121, Application US/09615192A

Patent No. 6410718

GENERAL INFORMATION:
APPLICANT: Bloksberg, Leonard N.
APPLICANT: Bloksberg, Leonard N.
TITLE OF INVENTION: Materials and Methods for the
TITLE OF INVENTION: Materials and Methods for the
TITLE OF INVENTION: Modification of Plant Lignin Content
CURRENT APPLICATION UNMBER: US/09/615,192A

CURRENT FILING DATE: 2000-07-12
PRIOR APPLICATION NUMBER: US 08/975,316
PRIOR APPLICATION NUMBER: US 08/975,316
PRIOR APPLICATION NUMBER: US 08/975,316
PRIOR FILING DATE: 1996-09-11
PRIOR APPLICATION NUMBER: US 09/169,789

PRIOR FILING DATE: 1998-10-09

NUMBER OF SEQ ID NOS: 405

SOFTWARE: FastSEQ for Windows Version 3.0

LENGINE LILA
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775 TGGAATTAAG 785
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GenCore version 5.1.6
Copyright (c) 1993 - 2003 Compugen Ltd.
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OM nucleic - nuc	OM nucleic - nucleic search, using sw model
Run on:	June 11, 2003, 15:36:13 ; Search time 9737 Seconds (without alignments) 11543.087 Million cell updates/sec
Title: Perfect score: Sequence:	US-09-674-195C-1 3862 1 ggatcctgctgctccgataaacaccttcaaaaaggatcc 3862
Scoring table:	IDENTITY_NUC Gapop 10.0 , Gapext 1.0
Searched:	2054640 seqs, 14551402878 residues
Total number of	Total number of hits satisfying chosen parameters: 4109280
Minimum DB seq Maximum DB seq	Minimum DB seq length: 0 Maximum DB seq length: 200000000

Post-processing: Minimum Match 08

Maximum Match 1008

Listing first 45 summarles

Database : GenEmbl:*

1: gb_ba:*

Database : GenEmbl:*

1: gb_ba:*

2: gb_ntg:*

4: gb_om:*

5: gb_om:*

7: gb_om:*

7: gb_om:*

10: gb_re:*

10: gb_ro:*

11: gb_ro:*

11: gb_ro:*

13: gb_un:*

14: gb_ul:*

15: em_fun:*

16: em_fun:*

17: em_nu:*

19: em_nu:*

22: em_ov:*

21: em_or:*
22: em_ov:*
23: em_ov:*
24: em_ph:*
25: em_pl:*
26: em_ro:*
27: em_sts:*
28: em_un:*
29: em_ty!:*
30: em_htg_hum:*
31: em_htg_num:*
33: em_htg_num:*
34: em_htg_num:*
35: em_htg_num:*

Pred. No. is the number of results predicted by chance to have a

em_htgo_hum: * em_htgo_mus: * em_htgo_other: *

em_htg_mam:* em_htg_vrt:*

Ajellomyces capsulatus.
Ajellomyces capsulatus
Eukaryota; Pangl; Ascomycota; Pezizomycotina; Eurotiomycetes;
Eukaryota; Pungl; Ascomycota; Pezizomycotina; Eurotiomycetes;
Onygenales; Onygenaceae; Ajellomyces.

I (bases 1 to 3863)
Zancope-Oliveira,R.M., Reiss,E., Lott,T.J., Mayer,L.W. and Deepe,G.S. Jr.
Molecular cloning, characterization, and expression of the M

REFERENCE AUTHORS TITLE

score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

7.6CT 0/17 T. 7.6CT		13100CHWD 1 COVC 1 1 COLT	150 2 1 2602 1 54026167	159.2 4.7 SPY28916/	738.5 4.1 2692.11 2692.1 4.5CT	COTTONION TO THE STORY THE STORY		1200004 t 0411c t 4 c 021 tc	37 159 2 4 1 21149 1 AE008757 AE008757	3/ 159.2 4.1 21149 1 AEUU8/5/	1000001 FIT 7:15 1 PROCOLUL
59.2 4.1 2692 1 STY289167 AJ289157 58.4 4.1 20149 1 AE008757 AE008757 58.4 4.1 3466 1 ECOKATE 57.8 4.1 11191 1 AE000268 M55161 E. 57.8 4.1 11192 1 AE000268 BE000268 57.8 4.1 110013 2 AC046157 54.6 4.0 12098 1 AE012209 AL627209 54.4 4.0 233050 1 AE012209 AL627271 53.6 4.0 10029 1 AE013432 AE013432 ALIGNMENTS ALIGNMENTS AF026268 3863 bp DNA linear PLN Aiellomyces Capsulatus Mantioen Gene. Complete cds.	159.2 4.1 2692 1 STY289167 ADJ89167 159.2 4.1 2692 1 STY289167 ADJ891707 159.2 4.1 29250 1 AD008757 AD00876 A	159.2 4.1 2092 1 51789107 A0209107 159.2 4.1 2092 1 51789107 AD008757 A0209107 A0209107 158.4 4.1 292550 1 AP001513 AP001513 M55161 E. 157.8 4.1 1152 1 D50816 D50816 D57.8 4.1 116013 2 AC046157 AC04615	159.2 4.1 210.4 1 AE008757 158.4 4.1 292550 1 AE0081513 AE008757 157.8 4.1 11911 AE000568 AE000368 157.8 4.1 11921 1 AE000568 BO00368 157.8 4.1 110013 2 AC046157 AC046157 154.6 4.0 12098 1 AE012209 154.4 4.0 23050 1 AE012209 AL627271 153.6 4.0 10029 1 AE013432 AE013432 ALICNMENTS AE026268 3863 bp DNA linear PLN Adollowers Complete Cds.	159.2 4.1 21149 1 AE008757 AE008757 AE008757 159.2 4.1 21149 1 AE008757 AE008757 AE008757 AE008757 AE008757 AE008757 AE008757 AE001513 AE001513 AE001513 AE001513 AE001513 AE001513 AE001513 AE001513 AE001513 AE015209 AE012209 AE0	159.2 4.1 21149 1 AE008757 AE008757 AE0008757 158.4 4.1 292550 1 AE001513 AE01513 AE01513 AE01513 AE01513 AE01513 AE01513 AE01513 AE01513 AE01313 AE013	159.2 4.1 21149 1 AED08757 AED08757 158.4 4.1 29250 1 APD01513 APD01513 APD01513 APD01513 APD01513 APD01513 APD01513 AED00268 AED00269 AED000269 AED000000000000000000000000000000000000	159.2 4.1 21149 1 AE0018/3/ 159.2 4.1 22150 1 AE0018/3/ 157.8 4.1 3466 1 ECOKATE M55161 E. 157.8 4.1 1191 1 AE00208	158.4 4.1 21149 1 AE00873 AE001513 AE01513 AE0	158.4 4.1 292550	158.4 4.1 292550 1 AP001513 AP001513 AP001513 157.8 4.1 3466 1 ECOKATE M55161 E. 157.8 4.1 11191 1 AE00268 BO0268 BO0268 157.8 4.1 110913 2 AC046157 AC04615	158.4 4.1 292550 1 AP001513 AP00268 AP00268 AP00268 AP00268 AP00268 AP00268 AP00268 AP00268 AP00269 AP0 AP00250 AP00
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159.4 4.1 10991 1 AE005396 159.4 4.1 257071 1 AP002558 150.7 7 1 2470 1 SWAY03060	159.4 4.1 10991 1 AE005396 159.4 4.1 257071 1 AE002558 159.2 4.1 2470 1 STY493069	159.4 4.1 10991 1 AE005396 159.4 4.1 257071 1 AP002558 159.2 4.1 2470 1 STX493069	159.4 4.1 10991 1 AE005396 159.4 4.1 257071 1 AP002558 159.2 4.1 2470 1 STY493069	159.4 4.1 10991 1 AE005396 159.4 4.1 257071 1 AP002558 159.2 4.1 2470 1 STY493069	159.4 4.1 10991 1 AE005396 159.4 4.1 257071 1 AP002558 159.2 4.1 2470 1 STY493069	159.4 4.1 10991 1 AE005396 159.4 4.1 257071 1 AE002558 159.2 4.1 2470 1 STX493069 150.2 4.1 260.2 1 STX930169	159.4 4.1 10991 1 AE005396 159.4 4.1 257071 1 AE002558 159.2 4.1 2470 1 STY493069 159.2 4.1 2692 1 STY289167	159.4 4.1 10991 1 AE005396 159.4 4.1 277071 1 AP002558 159.2 4.1 2470 1 STY493069 159.2 4.1 2692 1 STY289167	33 159.4 4.1 10991 1 AE005396 34 159.4 4.1 25771 1 AE002558 35 159.2 4.1 2470 1 STY293069 36 159.2 4.1 2692 1 STY299167	33 159.4 4.1 10991 1 AE005396 34 159.4 4.1 25771 1 AF002558 35 159.2 4.1 2470 1 STY493069 36 159.2 4.1 2692 1 STX289167	33 159.4 4.1 10991 1 AE005396 34 159.4 4.1 257071 1 AP002558 35 159.2 4.1 2470 1 STY493069 36 159.2 4.1 2692 1 STY289167 37 150.2 4.1 21140 1 AE008757
159.4 4.1 10991 1 AE005396 159.4 4.1 257071 1 AE002558 150.4 4.1 257071 1 AE002558	159.4 4.1 10991 1 AE005396 159.4 4.1 257071 1 AP002558 159.4 4.1 247071 1 STY493069	159.4 4.1 10991 1 AE005396 159.4 4.1 257071 1 AP002558 159.2 4.1 2470 1 STX493069	159.4 4.1 10991 1 AE005396 159.4 4.1 257071 1 AP002558 159.2 4.1 2470 1 STX493069	159.4 4.1 10991 1 AE005396 159.4 4.1 257071 1 AP002558 159.2 4.1 2470 1 STY493069	159.4 4.1 10991 1 AE005396 159.4 4.1 257071 1 AP002558 159.2 4.1 2470 1 STY493069	159.4 4.1 10991 1 AE005396 159.4 4.1 257071 1 AP002558 159.2 4.1 2470 1 STY493069 150.2 4.1 260.7 1 STY493069	159.4 4.1 10991 1 AE005396 159.4 4.1 257071 1 AE002558 159.2 4.1 2470 1 STY2493069 159.2 4.1 2692 1 STY289167	159.4 4.1 10991 1 AE005396 159.4 4.1 257071 1 AP002558 159.2 4.1 25470 1 STY493069 159.2 4.1 2692 1 STY289167	33 159.4 4.1 10991 1 AE005396 34 159.4 4.1 257071 1 AE002558 35 159.2 4.1 2470 1 STY2893069 36 159.2 4.1 2692 1 STY289167	33 159.4 4.1 10991 1 AE005396 34 159.4 4.1 257071 1 AP002558 35 159.2 4.1 2470 1 STX493069 36 159.2 4.1 2692 1 STX289167	33 159.4 4.1 10991 1 AE005396 34 159.4 4.1 257071 1 AP002558 35 159.2 4.1 2470 1 STY493069 36 159.2 4.1 2692 1 STY289167 37 150 7 1 1 AE008757
159.4 4.1 10991 1 AE002396 159.4 4.1 257071 1 AE002558 159.4 4.1 257071 1 AE002558	159.4 4.1 10991 1 AE005396 159.4 4.1 257071 1 AF002558 159.2 4.1 2470 1 STY493069	159.4 4.1 10991 1 AE005396 159.4 4.1 257071 1 AP002558 159.2 4.1 2470 1 STY493069	159.4 4.1 10991 1 AE005396 159.4 4.1 257071 1 AP002558 159.2 4.1 2470 1 STX493069	159.4 4.1 10991 1 AE002536 159.4 4.1 257071 1 AP002558 159.2 4.1 2470 1 STY493069	159.4 4.1 10991 1 AE002536 159.4 4.1 257071 1 AP002558 159.2 4.1 2470 1 STY493069	159.4 4.1 10991 1 AE002536 159.4 4.1 257071 1 AP002558 159.2 4.1 2470 1 STY493069 159.2 4.1 2470 1 STY493069	159.4 4.1 10991 1 AE002596 159.4 4.1 257071 1 AE002558 159.2 4.1 2470 1 STY493069 159.2 4.1 2692 1 STY289167	159.4 4.1 10991 1 AE005396 159.4 4.1 257071 1 AE002558 159.2 4.1 257071 1 STY493069 159.2 4.1 2692 1 STY289167	33 159.4 4.1 10991 1 AE002536 34 159.4 4.1 257071 1 AP002558 35 159.2 4.1 2470 1 STY493069 36 159.2 4.1 2692 1 STY289167	33 159.4 4.1 10991 1 AE002396 34 159.4 4.1 257071 1 AP002558 35 159.2 4.1 2470 1 STX493069 36 159.2 4.1 2692 1 STX289167	33 159.4 4.1 10991 1 AE002536 34 159.4 4.1 257071 1 AP002558 35 159.2 4.1 2470 1 STY493069 36 159.2 4.1 2692 1 STY289167 37 159.2 4.1 1 AE008757
159.4 4.1 10991 1 AE002596 159.4 4.1 257071 1 AE00558 159.4 4.1 257071 1 AE002558	159.4 4.1 10991 1 AE002598 159.4 4.1 10991 1 AE005396 159.4 4.1 257071 1 AF002558 159.2 4.1 2470 1 STY493069	159.4 4.1 247/30 1 AE002396 159.4 4.1 257071 1 AE002558 159.4 4.1 2470 1 STX493069	159.4 4.1 10991 1 AE002596 159.4 4.1 257071 1 AP002558 159.2 4.1 2470 1 STX493069	159.4 4.1 10991 1 AE002596 159.4 4.1 257071 1 AE002558 159.2 4.1 2470 1 STY493069	159.4 4.1 10991 1 AE002596 159.4 4.1 257071 1 AE002558 159.2 4.1 257071 1 AP002558 159.2 4.1 2470 1 STY493069	159.4 4.1 10991 1 AE002596 159.4 4.1 257071 1 AE002558 159.2 4.1 257071 1 AP002558 159.2 4.1 2470 1 STY493069 150.2 4.1 260.2 1 STY493069	159.4 4.1 10991 1 ABO02596 159.4 4.1 257071 1 ABO02558 159.2 4.1 257071 1 APO02558 159.2 4.1 2670 1 STY2493069	159.4 4.1 10991 1 AE005396 159.4 4.1 257071 1 AE005558 159.2 4.1 257071 1 STY493069 159.2 4.1 2692 1 STY289167	32 152.0 4.2 34/750 1 AF002395 33 159.4 4.1 257071 1 AF00558 34 159.2 4.1 2470 1 STX493069 36 159.2 4.1 2692 1 STX289167	34 159.4 4.1 257071 AF002596 34 159.4 4.1 257071 AF002558 35 159.2 4.1 2470 1 STX493069 36 159.2 4.1 2692 1 STX289167	32 159.4 4.1 10991 1 AE002396 34 159.4 4.1 257071 1 AE002558 35 159.2 4.1 2470 1 STY493069 36 159.2 4.1 2692 1 STY493167 37 159.2 4.1 1 AE002558
162.6 4.2 347750 1 APU02998 159.4 4.1 10991 1 AE005396 159.4 4.1 257071 1 AP002558 150 4 1 2470 1 SWAY03060	162.6 4.2 347750 1 APU02998 159.4 4.1 10991 1 AE005396 159.4 4.1 257071 1 AP002558 159.2 4.1 2470 1 STY493069	162.6 4.2 347750 1 APU02998 159.4 4.1 10991 1 AE005396 159.4 4.1 257071 1 AP002558 159.2 4.1 2470 1 STX493069	162.6 4.2 347750 1 APU012998 159.4 4.1 10991 1 AE005396 159.4 4.1 257071 1 AP002558 159.2 4.1 2470 1 STX493069	162.6 4.2 347750 1 APU02998 159.4 4.1 10991 1 APO025396 159.4 4.1 257071 1 APO02558 159.2 4.1 2470 1 STY493069	159.4 4.1 10991 1 AE002398 159.4 4.1 10991 1 AE00258 159.4 4.1 257071 1 AP002558 159.2 4.1 2470 1 STY493069	152.6 4.2 347750 1 APU012998 159.4 4.1 10991 1 AE005396 159.2 4.1 257071 1 AP002558 159.2 4.1 2470 1 STY493069 150.2 4.1 260.2 1 STY493069	152.6 4.2 347750 1 APU012998 159.4 4.1 10991 1 AE005396 159.2 4.1 257071 1 AP002558 159.2 4.1 2470 1 STYA93069 159.2 4.1 2692 1 STYA93069	162.6 4.2 347750 1 APU02998 159.4 4.1 10991 1 AE005396 159.4 4.1 257071 1 AP002558 159.2 4.1 2470 1 STY493069 159.2 4.1 2692 1 STY289167	32 162.6 4.2 34/750 1 AE002998 33 159.4 4.1 10991 1 AE005396 34 159.4 4.1 257071 1 AP002558 35 159.2 4.1 2470 1 STX493069 36 159.2 4.1 2692 1 STX289167	32 162.6 4.2 34/750 1 APU02998 33 159.4 4.1 10991 1 AE005396 34 159.4 4.1 257071 1 AP002558 35 159.2 4.1 2470 1 STY493069 36 159.2 4.1 2692 1 STY289167	32 152.6 4.2 34/750 1 AFU012998 33 159.4 4.1 210991 1 AF005396 34 159.4 4.1 257071 1 AF002558 35 159.2 4.1 2470 1 STY493069 36 159.2 4.1 2692 1 STY289167 37 150.7 4.1 1 AF008757
162.6 4.2 347750 1 AP002998 159.4 4.1 10991 1 AE005396 159.4 4.1 257071 1 AP002558 150.7 7 1 2470 1 SWAY03060	162.6 4.2 347750 1 AP002998 159.4 4.1 10991 1 AE005396 159.4 4.1 257071 1 AP002558 159.2 4.1 2470 1 STY493069	162.6 4.2 347750 1 AP002998 159.4 4.1 10991 1 AE005396 159.4 4.1 257071 1 AP002558 159.2 4.1 2470 1 STX493069	162.6 4.2 347750 1 AP002998 159.4 4.1 10991 1 AE005396 159.4 4.1 257071 1 AP002558 159.2 4.1 2470 1 STX493069	162.6 4.2 347750 1 AP002998 159.4 4.1 10991 1 AE005396 159.4 4.1 257071 1 AP002558 159.2 4.1 2470 1 STX493069	159.4 4.1 27750 1 AP002998 159.4 4.1 277071 1 AP002558 159.2 4.1 27771 1 AP002558 159.2 4.1 2470 1 STY493069	152.6 4.2 347750 1 APD02998 159.4 4.1 10991 1 AE005396 159.4 4.1 257071 1 AP002558 159.2 4.1 2470 1 SYY493069 150.2 4.1 2670 1 SYY493069	162.6 4.2 347750 1 AP002998 159.4 4.1 10991 1 AE005396 159.4 4.1 257071 1 AP002558 159.2 4.1 2470 1 STY493069 159.2 4.1 2692 1 STY289167	162.6 4.2 347750 1 AP002998 159.4 4.1 10991 1 AE005396 159.4 4.1 257071 1 AP002558 159.2 4.1 2470 1 STY493069 159.2 4.1 2692 1 STY289167	32 162.6 4.2 347750 1 AP002998 33 159.4 4.1 10991 1 AE005396 34 159.4 4.1 257071 1 AP002558 35 159.2 4.1 2470 1 STY493069 36 159.2 4.1 2692 1 STY289167	32 162.6 4.2 347750 1 AP002998 33 159.4 4.1 10991 1 AE005396 34 159.4 4.1 257071 1 AP002558 35 159.2 4.1 2470 1 STY493069 36 159.2 4.1 2692 1 STY289167	32 162.6 4.2 347750 1 AP002998 33 159.4 4.1 10991 1 AE005396 34 159.4 4.1 257071 1 AP002558 35 159.2 4.1 2470 1 STX493069 36 159.2 4.1 2692 1 STX289167 37 150.2 4.1 2410.0 1 AP008757
162.6 4.2 347750 1 AP002998 159.4 4.1 10991 1 AE005396 159.4 4.1 257071 1 AP002558 150.7 7 7 2470 1 SWAY03060	162.6 4.2 347750 1 AP002998 159.4 4.1 10991 1 AE005396 159.4 4.1 257071 1 AP002558 159.2 4.1 2470 1 STY493069	162.6 4.2 347750 1 AP002998 159.4 4.1 10991 1 AE005396 159.4 4.1 257071 1 AP002558 159.2 4.1 2470 1 STY493069	162.6 4.2 347750 1 AP002998 159.4 4.1 10991 1 AE005396 159.4 4.1 257071 1 AP002558 159.2 4.1 2470 1 STX493069	162.6 4.2 347750 1 AP002998 159.4 4.1 10991 1 AP002396 159.4 4.1 257071 1 AP002558 159.2 4.1 2470 1 STX493069	162.6 4.2 347750 1 AP002998 159.4 4.1 10991 1 AE005396 159.4 4.1 257071 1 AP002558 159.2 4.1 2470 1 STY493069	159.4 4.1 247750 1 APD02998 159.4 4.1 10991 1 AE00258 159.4 4.1 257071 1 AP002558 159.2 4.1 2470 1 STY493069 150.2 4.1 2670 1 STY493069	162.6 4.2 347750 1 AP002998 159.4 4.1 10991 1 AE005396 159.4 4.1 257071 1 AP002558 159.2 4.1 2470 1 STY493069 159.2 4.1 2692 1 STY289167	162.6 4.2 347750 1 AP002998 159.4 4.1 10991 1 AE005396 159.4 4.1 257071 1 AP002558 159.2 4.1 2470 1 STY493069 159.2 4.1 2692 1 STY289167	32 162.6 4.2 347750 1 AP002998 33 159.4 4.1 10991 1 AE005396 34 159.4 4.1 257071 1 AP002558 35 159.2 4.1 2470 1 STY493069 36 159.2 4.1 2692 1 STY299167	32 162.6 4.2 347750 1 AP002998 33 159.4 4.1 10991 1 AE005396 34 159.4 4.1 257071 1 AP002558 35 159.2 4.1 2470 1 STX493069 36 159.2 4.1 2692 1 STX289167	32 162.6 4.2 347750 1 AP002998 33 159.4 4.1 10991 1 AE005396 34 159.4 4.1 257071 1 AP002558 35 159.2 4.1 2470 1 STY493069 36 159.2 4.1 2692 1 STY289167 37 150.2 4.1 2410.0 1 AP005757
162.6 4.2 347750 1 AP002998 159.4 4.1 10991 1 AE005396 159.4 4.1 257071 1 AP002558 150.7 7 1 2470 1 SWAY03060	162.6 4.2 347750 1 AP002998 159.4 4.1 10991 1 AE005396 159.4 4.1 257071 1 AP002558 159.2 4.1 2470 1 STY493069	162.6 4.2 347750 1 AP002998 159.4 4.1 10991 1 AE005396 159.4 4.1 257071 1 AP002558 159.2 4.1 2470 1 STY493069	162.6 4.2 347750 1 AP002998 159.4 4.1 10991 1 AE005396 159.4 4.1 257071 1 AP002558 159.2 4.1 2470 1 STX493069	162.6 4.2 347750 1 AP002998 159.4 4.1 10991 1 AE005396 159.4 4.1 257071 1 AP002558 159.2 4.1 2470 1 STX493069	162.6 4.2 347750 1 AP002998 159.4 4.1 10991 1 AE005396 159.4 4.1 257071 1 AP002558 159.2 4.1 25470 1 STY493069	162.6 4.2 347750 1 AP002998 AP002998 159.4 4.1 257071 1 AP002558 AP002558 159.2 4.1 24707 1 STR493069 AP002558 159.2 4.1 2470.1 STR493069 AP00259069 AP0025069 AP0	162.6 4.2 347750 1 AP002998 159.4 4.1 10991 1 AE005396 159.4 4.1 257071 1 AP002558 159.2 4.1 2470 1 STY493069 159.2 4.1 2692 1 STY289167	162.6 4.2 347750 1 AP002998 159.4 4.1 10991 1 AE005396 159.4 4.1 257071 1 AP002558 159.2 4.1 2470 1 STY493069 159.2 4.1 2692 1 STY289167	32 162.6 4.2 347750 1 AP002998 33 159.4 4.1 10991 1 AE005396 34 159.4 4.1 257071 1 AP002558 35 159.2 4.1 2470 1 STY493069 36 159.2 4.1 2692 1 STY493069	32 162.6 4.2 347750 1 AP002998 33 159.4 4.1 10991 1 AE005396 34 159.4 4.1 257071 1 AP002558 35 159.2 4.1 2470 1 STX493069 36 159.2 4.1 2692 1 STX289167	32 162.6 4.2 347750 1 AP002998 33 159.4 4.1 10991 1 AE005396 34 159.4 4.1 257071 1 AP002558 35 159.2 4.1 2470 1 STY493069 36 159.2 4.1 2692 1 STY289167 37 150.2 4.1 2410.0 1 AP005757
162.6 4.2 347750 1 AP002998 159.4 4.1 10991 1 AE005396 159.4 4.1 257071 1 AP002558 150.7 7 1 2470 1 SWAY03060	162.6 4.2 347750 1 AP002998 159.4 4.1 10991 1 AE005396 159.4 4.1 257071 1 AP002558 159.2 4.1 2470 1 STY493069	162.6 4.2 347750 1 AP002998 159.4 4.1 10991 1 AE005396 159.4 4.1 257071 1 AP002558 159.2 4.1 2470 1 STY493069	162.6 4.2 347750 1 AP002998 159.4 4.1 10991 1 AE005396 159.4 4.1 257071 1 AP002558 159.2 4.1 2470 1 STX493069	162.6 4.2 347750 1 AP002998 159.4 4.1 10991 1 AE005396 159.4 4.1 257071 1 AP002558 159.2 4.1 2470 1 STX493069	162.6 4.2 347750 1 AP002998 159.4 4.1 10991 1 AE005396 159.4 4.1 257071 1 AP002558 159.2 4.1 25470 1 STY493069	159.4 4.1 257750 1 AP002998 159.4 4.1 10991 1 AE002586 159.4 4.1 257071 1 AP002558 159.2 4.1 2470 1 STY493069 150.2 4.1 260.2 1 STY493069	162.6 4.2 347750 1 AP002998 159.4 4.1 10991 1 AE005396 159.4 4.1 257071 1 AP002558 159.2 4.1 2470 1 STY493069 159.2 4.1 2692 1 STY289167	162.6 4.2 347750 1 AP002998 159.4 4.1 10991 1 AE005396 159.4 4.1 257071 1 AP002558 159.2 4.1 2470 1 STY493069 159.2 4.1 2692 1 STY289167	32 162.6 4.2 347750 1 AP002998 33 159.4 4.1 10991 1 AE005396 34 159.4 4.1 257071 1 AP002558 35 159.2 4.1 2470 1 STY493069 36 159.2 4.1 2692 1 STY493069	32 162.6 4.2 347750 1 AP002998 33 159.4 4.1 10991 1 AE005396 34 159.4 4.1 257071 1 AP002558 35 159.2 4.1 2470 1 STX493069 36 159.2 4.1 2692 1 STX289167	32 162.6 4.2 347750 1 AP002998 33 159.4 4.1 10991 1 AE005396 34 159.4 4.1 257071 1 AP002558 35 159.2 4.1 2470 1 STY493069 36 159.2 4.1 2692 1 STY289167 37 150.2 4.1 2410.0 1 AP005757
162.6 4.2 347750 1 AP002998 159.4 4.1 10991 1 AE005396 159.4 4.1 257071 1 AP002558 150.7 7 7 2470 1 SWAY03060	162.6 4.2 347750 1 AP002998 159.4 4.1 10991 1 AE005396 159.4 4.1 257071 1 AP002558 159.2 4.1 2470 1 STY493069	162.6 4.2 347750 1 AP002998 159.4 4.1 10991 1 AE005396 159.4 4.1 257071 1 AP002558 159.2 4.1 2470 1 STY493069	162.6 4.2 347750 1 AP002998 159.4 4.1 10991 1 AE005396 159.4 4.1 257071 1 AP002558 159.2 4.1 2470 1 STX493069	162.6 4.2 347750 1 AP002998 159.4 4.1 10991 1 AP002396 159.4 4.1 257071 1 AP002558 159.2 4.1 2470 1 STX493069	162.6 4.2 347750 1 AP002998 159.4 4.1 10991 1 AE005396 159.4 4.1 257071 1 AP002558 159.2 4.1 2470 1 STY493069	159.4 4.1 247750 1 APD02998 159.4 4.1 10991 1 AE00258 159.4 4.1 257071 1 AP002558 159.2 4.1 2470 1 STY493069 150.2 4.1 2670 1 STY493069	162.6 4.2 347750 1 AP002998 159.4 4.1 10991 1 AE005396 159.4 4.1 257071 1 AP002558 159.2 4.1 2470 1 STY493069 159.2 4.1 2692 1 STY289167	162.6 4.2 347750 1 AP002998 159.4 4.1 10991 1 AE005396 159.4 4.1 257071 1 AP002558 159.2 4.1 2470 1 STY493069 159.2 4.1 2692 1 STY289167	32 162.6 4.2 347750 1 AP002998 33 159.4 4.1 10991 1 AE005396 34 159.4 4.1 257071 1 AP002558 35 159.2 4.1 2470 1 STY493069 36 159.2 4.1 2692 1 STY299167	32 162.6 4.2 347750 1 AP002998 33 159.4 4.1 10991 1 AE005396 34 159.4 4.1 257071 1 AP002558 35 159.2 4.1 2470 1 STX493069 36 159.2 4.1 2692 1 STX289167	32 162.6 4.2 347750 1 AP002998 33 159.4 4.1 10991 1 AE005396 34 159.4 4.1 257071 1 AP002558 35 159.2 4.1 2470 1 STY493069 36 159.2 4.1 2692 1 STY289167 37 150.2 4.1 2410.0 1 AP005757
162.6 4.2 347750 1 AP002998 159.4 4.1 10991 1 AE005396 159.4 4.1 257071 1 AP002558 150.7 7 1 2470 1 SWAY03060	162.6 4.2 347750 1 AP002998 159.4 4.1 10991 1 AE005396 159.4 4.1 257071 1 AP002558 159.2 4.1 2470 1 STY493069	162.6 4.2 347750 1 AP002998 159.4 4.1 10991 1 AE005396 159.4 4.1 257071 1 AP002558 159.2 4.1 2470 1 STX493069	162.6 4.2 347750 1 AP002998 159.4 4.1 10991 1 AE005396 159.4 4.1 257071 1 AP002558 159.2 4.1 2470 1 STX493069	162.6 4.2 347750 1 AP002998 159.4 4.1 10991 1 AE005396 159.4 4.1 257071 1 AP002558 159.2 4.1 2470 1 STX493069	159.4 4.1 27750 1 AP002998 159.4 4.1 277071 1 AP002558 159.2 4.1 27771 1 AP002558 159.2 4.1 2470 1 STY493069	152.6 4.2 347750 1 APD02998 159.4 4.1 10991 1 AE005396 159.4 4.1 257071 1 AP002558 159.2 4.1 2470 1 SYY493069 150.2 4.1 2670 1 SYY493069	162.6 4.2 347750 1 AP002998 159.4 4.1 10991 1 AE005396 159.4 4.1 257071 1 AP002558 159.2 4.1 2470 1 STY493069 159.2 4.1 2692 1 STY289167	162.6 4.2 347750 1 AP002998 159.4 4.1 10991 1 AE005396 159.4 4.1 257071 1 AP002558 159.2 4.1 2470 1 STY493069 159.2 4.1 2692 1 STY289167	32 162.6 4.2 347750 1 AP002998 33 159.4 4.1 10991 1 AE005396 34 159.4 4.1 257071 1 AP002558 35 159.2 4.1 2470 1 STY493069 36 159.2 4.1 2692 1 STY289167	32 162.6 4.2 347750 1 AP002998 33 159.4 4.1 10991 1 AE005396 34 159.4 4.1 257071 1 AP002558 35 159.2 4.1 2470 1 STY493069 36 159.2 4.1 2692 1 STY289167	32 162.6 4.2 347750 1 AP002998 33 159.4 4.1 10991 1 AE005396 34 159.4 4.1 257071 1 AP002558 35 159.2 4.1 2470 1 STY493069 36 159.2 4.1 2692 1 STY289167 37 150.2 4.1 2410.0 1 AP008757
162.6 4.2 347750 1 APU02998 159.4 4.1 10991 1 AE005396 159.4 4.1 257071 1 AP002558 150 4 1 2470 1 SWAY03060	162.6 4.2 347750 1 APU02998 159.4 4.1 10991 1 AE005396 159.4 4.1 257071 1 AP002558 159.2 4.1 2470 1 STY493069	162.6 4.2 347750 1 APU02998 159.4 4.1 10991 1 AE005396 159.4 4.1 257071 1 AP002558 159.2 4.1 2470 1 STX493069	162.6 4.2 347750 1 APU012998 159.4 4.1 10991 1 AE005396 159.4 4.1 257071 1 AP002558 159.2 4.1 2470 1 STX493069	162.6 4.2 347750 1 APU02998 159.4 4.1 10991 1 APO025396 159.4 4.1 257071 1 APO02558 159.2 4.1 2470 1 STY493069	159.4 4.1 10991 1 AE002398 159.4 4.1 10991 1 AE00258 159.4 4.1 257071 1 AP002558 159.2 4.1 2470 1 STY493069	152.6 4.2 347750 1 APU012998 159.4 4.1 10991 1 AE005396 159.2 4.1 257071 1 AP002558 159.2 4.1 2470 1 STY493069 150.2 4.1 260.2 1 STY493069	152.6 4.2 347750 1 APU012998 159.4 4.1 10991 1 AE005396 159.2 4.1 257071 1 AP002558 159.2 4.1 2470 1 STYA93069 159.2 4.1 2692 1 STYA93069	162.6 4.2 347750 1 APU02998 159.4 4.1 10991 1 AE005396 159.4 4.1 257071 1 AP002558 159.2 4.1 2470 1 STY493069 159.2 4.1 2692 1 STY289167	32 162.6 4.2 34/750 1 AE002998 33 159.4 4.1 10991 1 AE005396 34 159.4 4.1 257071 1 AP002558 35 159.2 4.1 2470 1 STX493069 36 159.2 4.1 2692 1 STX289167	32 162.6 4.2 34/750 1 APU02998 33 159.4 4.1 10991 1 AE005396 34 159.4 4.1 257071 1 AP002558 35 159.2 4.1 2470 1 STY493069 36 159.2 4.1 2692 1 STY289167	32 152.6 4.2 34/750 1 AFU012998 33 159.4 4.1 210991 1 AF005396 34 159.4 4.1 257071 1 AF002558 35 159.2 4.1 2470 1 STY493069 36 159.2 4.1 2692 1 STY289167 37 150.7 4.1 1 AF008757
162.6 4.2 347/50 1 APU02998 159.4 4.1 10991 1 AE005396 159.4 4.1 257071 1 AP002558 150 4 1 2470 1 STRAM 03060	162.6 4.2 34/750 1 APOUZ998 159.4 4.1 10991 1 AE005396 159.4 4.1 257071 1 APO02558 159.2 4.1 2470 1 STY493069	162.6 4.2 34/750 1 APU012938 159.4 4.1 10991 1 AE005396 159.4 4.1 257071 1 AP002558 159.2 4.1 2470 1 STY493069	152.6 4.2 34/750 1 APUOL2938 159.4 4.1 10991 1 AE005396 159.4 4.1 257071 1 APUOL2558 159.2 4.1 2470 1 STX493069	162.6 4.2 34/750 1 APU012938 159.4 4.1 10991 1 AE002558 159.4 4.1 257071 1 AP002558 159.2 4.1 2470 1 STY493069	152.6 4.2 34/7.50 1 APU012938 159.4 4.1 10991 1 AE005396 159.4 4.1 257071 1 AP002558 159.2 4.1 2470 1 STY493069	152.6 4.2 34.7.50 1 APU012998 159.4 4.1 10991 1 AE005396 159.2 4.1 257071 1 AP002558 159.2 4.1 2470 1 STY493069 150.2 4.1 260.2 1 STY493069	159.4 4.1 10991 1 ARD02598 159.4 4.1 257071 1 ARD02558 159.2 4.1 257071 1 ARD02558 159.2 4.1 2670 1 STY2493069	162.6 4.2 34/750 1 APU02938 159.4 4.1 10991 1 AE005396 159.4 4.1 257071 1 AP002558 159.2 4.1 2470 1 STY493069 159.2 4.1 2692 1 STY289167	32 152.6 4.2 34/750 1 AF002998 33 159.4 4.1 10991 1 AF005396 34 159.4 4.1 257071 1 AF002558 35 159.2 4.1 2470 1 STX493069 36 159.2 4.1 2692 1 STX289167	32 152.6 4.2 34/750 1 AF0U2998 33 159.4 4.1 10991 1 AF005396 34 159.4 4.1 257071 1 AF002558 35 159.2 4.1 2470 1 STY493069 36 159.2 4.1 2692 1 STY289167	32 159.4 4.1 25701 AF002998 33 159.4 4.1 257071 AF002558 34 159.2 4.1 2470 1 STX493069 36 159.2 4.1 2470 1 STX493069 37 159.2 4.1 269.1 STX493069
159.4 4.1 10991 1 AE002596 159.4 4.1 257071 1 AE00558 159.4 4.1 257071 1 AE002558	159.4 4.1 10991 1 AE002598 159.4 4.1 10991 1 AE005396 159.4 4.1 257071 1 AF002558 159.2 4.1 2470 1 STY493069	159.4 4.1 247/30 1 AE002396 159.4 4.1 257071 1 AE002558 159.4 4.1 2470 1 STX493069	159.4 4.1 10991 1 AE002596 159.4 4.1 257071 1 AP002558 159.2 4.1 2470 1 STX493069	159.4 4.1 10991 1 AE002596 159.4 4.1 257071 1 AE002558 159.2 4.1 2470 1 STY493069	159.4 4.1 10991 1 AE002596 159.4 4.1 257071 1 AE002558 159.2 4.1 257071 1 AP002558 159.2 4.1 2470 1 STY493069	159.4 4.1 10991 1 AE002596 159.4 4.1 257071 1 AE002558 159.2 4.1 257071 1 AP002558 159.2 4.1 2470 1 STY493069 150.2 4.1 260.2 1 STY493069	159.4 4.1 10991 1 ABO02596 159.4 4.1 257071 1 ABO02558 159.2 4.1 257071 1 APO02558 159.2 4.1 2670 1 STY2493069	159.4 4.1 10991 1 AE005396 159.4 4.1 257071 1 AE005558 159.2 4.1 257071 1 STY493069 159.2 4.1 2692 1 STY289167	32 152.0 4.2 34/750 1 AF002395 33 159.4 4.1 257071 1 AF00558 34 159.2 4.1 2470 1 STX493069 36 159.2 4.1 2692 1 STX289167	34 159.4 4.1 257071 AF002596 34 159.4 4.1 257071 AF002558 35 159.2 4.1 2470 1 STX493069 36 159.2 4.1 2692 1 STX289167	32 159.4 4.1 10991 1 AE002396 34 159.4 4.1 257071 1 AE002558 35 159.2 4.1 2470 1 STY493069 36 159.2 4.1 2692 1 STY493167 37 159.2 4.1 1 AE002558
159.4 4.1 10991 1 AE002596 159.4 4.1 257071 1 AE00558 159.4 4.1 257071 1 AE002558	159.4 4.1 10991 1 AE002598 159.4 4.1 10991 1 AE005396 159.4 4.1 257071 1 AF002558 159.2 4.1 2470 1 STY493069	159.4 4.1 247/30 1 AE002396 159.4 4.1 257071 1 AE002558 159.4 4.1 2470 1 STX493069	159.4 4.1 10991 1 AE002596 159.4 4.1 257071 1 AP002558 159.2 4.1 2470 1 STX493069	159.4 4.1 10991 1 AE002596 159.4 4.1 257071 1 AE002558 159.2 4.1 2470 1 STY493069	159.4 4.1 10991 1 AE002596 159.4 4.1 257071 1 AE002558 159.2 4.1 257071 1 AP002558 159.2 4.1 2470 1 STY493069	159.4 4.1 10991 1 AE002596 159.4 4.1 257071 1 AE002558 159.2 4.1 257071 1 AP002558 159.2 4.1 2470 1 STY493069 150.2 4.1 260.2 1 STY493069	159.4 4.1 10991 1 ABO02596 159.4 4.1 257071 1 ABO02558 159.2 4.1 257071 1 APO02558 159.2 4.1 2670 1 STY2493069	159.4 4.1 10991 1 AE005396 159.4 4.1 257071 1 AE005558 159.2 4.1 257071 1 STY493069 159.2 4.1 2692 1 STY289167	32 152.0 4.2 34/750 1 AF002395 33 159.4 4.1 257071 1 AF00558 34 159.2 4.1 2470 1 STX493069 36 159.2 4.1 2692 1 STX289167	34 159.4 4.1 257071 AF002596 34 159.4 4.1 257071 AF002558 35 159.2 4.1 2470 1 STX493069 36 159.2 4.1 2692 1 STX289167	32 159.4 4.1 10991 1 AE002396 34 159.4 4.1 257071 1 AE002558 35 159.2 4.1 2470 1 STY493069 36 159.2 4.1 2692 1 STY493167 37 159.2 4.1 1 AE002558
159.4 4.1 10991 1 AE005396 159.4 4.1 257071 1 AE005396 159.4 4.1 257071 1 EMPOS368	159.4 4.1 10991 1 AE005396 159.4 4.1 257071 1 AE00558 159.2 4.1 257071 1 SPY493069	159.4 4.1 10991 1 AE002396 159.4 4.1 257071 1 AP002558 159.2 4.1 2470 1 STY493069	159.4 4.1 10991 1 AE002396 159.4 4.1 257071 1 AP002558 159.2 4.1 2470 1 STX493069	159.4 4.1 10991 1 AE002536 159.4 4.1 257071 1 AP002558 159.2 4.1 2470 1 STY493069	159.4 4.1 10991 1 AE002536 159.4 4.1 257071 1 AP002558 159.2 4.1 2470 1 STY493069	159.4 4.1 10991 1 AE002536 159.4 4.1 257071 1 AP002558 159.2 4.1 2470 1 SYT493069 159.2 4.1 2470 1 SYT493069	159.4 4.1 10991 1 AE002558 159.4 4.1 257071 1 AE002558 159.2 4.1 2470 1 STY493069 159.2 4.1 2692 1 STY289167	159.4 4.1 10991 1 AE002396 159.4 4.1 257071 1 AE002558 159.2 4.1 257071 1 STY493069 159.2 4.1 2692 1 STY289167	33 159.4 4.1 10991 1 AE002395 34 159.4 4.1 257071 1 AP002558 35 159.2 4.1 2470 1 STY493069 36 159.2 4.1 2692 1 STY289167	33 159.4 4.1 10991 1 AE002536 34 159.4 4.1 257071 1 AP002558 35 159.2 4.1 2470 1 STX493069 36 159.2 4.1 2692 1 STX289167	33 159.4 4.1 10991 1 AE002396 34 159.4 4.1 257071 1 AP002558 35 159.2 4.1 2470 1 STY493069 36 159.2 4.1 2692 1 STY493167 37 159.2 4.1 1 AF008757
159.4 4.1 10991 1 AE002396 159.4 4.1 257071 1 AE002558 159.4 4.1 257071 1 AE002558	159.4 4.1 10991 1 AE005396 159.4 4.1 257071 1 AF002558 159.2 4.1 2470 1 STY493069	159.4 4.1 10991 1 AE005396 159.4 4.1 257071 1 AP002558 159.2 4.1 2470 1 STY493069	159.4 4.1 10991 1 AE005396 159.4 4.1 257071 1 AP002558 159.2 4.1 2470 1 STX493069	159.4 4.1 10991 1 AE002536 159.4 4.1 257071 1 AP002558 159.2 4.1 2470 1 STY493069	159.4 4.1 10991 1 AE002536 159.4 4.1 257071 1 AP002558 159.2 4.1 2470 1 STY493069	159.4 4.1 10991 1 AE002536 159.4 4.1 257071 1 AP002558 159.2 4.1 2470 1 STY493069 159.2 4.1 2470 1 STY493069	159.4 4.1 10991 1 AE002596 159.4 4.1 257071 1 AE002558 159.2 4.1 2470 1 STY493069 159.2 4.1 2692 1 STY289167	159.4 4.1 10991 1 AE005396 159.4 4.1 257071 1 AE002558 159.2 4.1 257071 1 STY493069 159.2 4.1 2692 1 STY289167	33 159.4 4.1 10991 1 AE002536 34 159.4 4.1 257071 1 AP002558 35 159.2 4.1 2470 1 STY493069 36 159.2 4.1 2692 1 STY289167	33 159.4 4.1 10991 1 AE002396 34 159.4 4.1 257071 1 AP002558 35 159.2 4.1 2470 1 STX493069 36 159.2 4.1 2692 1 STX289167	33 159.4 4.1 10991 1 AE002536 34 159.4 4.1 257071 1 AP002558 35 159.2 4.1 2470 1 STY493069 36 159.2 4.1 2692 1 STY289167 37 159.2 4.1 1 AE008757
159.4 4.1 10991 1 AE005396 159.4 4.1 257071 1 AE002558 150.4 4.1 257071 1 AE002558	159.4 4.1 10991 1 AE005396 159.4 4.1 257071 1 AP002558 159.4 4.1 247071 1 STY493069	159.4 4.1 10991 1 AE005396 159.4 4.1 257071 1 AP002558 159.2 4.1 2470 1 STX493069	159.4 4.1 10991 1 AE005396 159.4 4.1 257071 1 AP002558 159.2 4.1 2470 1 STX493069	159.4 4.1 10991 1 AE005396 159.4 4.1 257071 1 AP002558 159.2 4.1 2470 1 STY493069	159.4 4.1 10991 1 AE005396 159.4 4.1 257071 1 AP002558 159.2 4.1 2470 1 STY493069	159.4 4.1 10991 1 AE005396 159.4 4.1 257071 1 AP002558 159.2 4.1 2470 1 STY493069 150.2 4.1 260.7 1 STY493069	159.4 4.1 10991 1 AE005396 159.4 4.1 257071 1 AE002558 159.2 4.1 2470 1 STY2493069 159.2 4.1 2692 1 STY289167	159.4 4.1 10991 1 AE005396 159.4 4.1 257071 1 AP002558 159.2 4.1 25470 1 STY493069 159.2 4.1 2692 1 STY289167	33 159.4 4.1 10991 1 AE005396 34 159.4 4.1 257071 1 AE002558 35 159.2 4.1 2470 1 STY2893069 36 159.2 4.1 2692 1 STY289167	33 159.4 4.1 10991 1 AE005396 34 159.4 4.1 257071 1 AP002558 35 159.2 4.1 2470 1 STX493069 36 159.2 4.1 2692 1 STX289167	33 159.4 4.1 10991 1 AE005396 34 159.4 4.1 257071 1 AP002558 35 159.2 4.1 2470 1 STY493069 36 159.2 4.1 2692 1 STY289167 37 150 7 1 1 AE008757
159.4 4.1 10991 1 AE005396 159.4 4.1 257071 1 AP002558 150.7 7 1 2470 1 SWAY03060	159.4 4.1 10991 1 AE005396 159.4 4.1 257071 1 AE002558 159.2 4.1 2470 1 STY493069	159.4 4.1 10991 1 AE005396 159.4 4.1 257071 1 AE002558 159.2 4.1 2470 1 STY493069	159.4 4.1 10991 1 AE005396 159.4 4.1 257071 1 AP002558 159.2 4.1 2470 1 STY493069	159.4 4.1 10991 1 AE005396 159.4 4.1 257071 1 AP002558 159.2 4.1 2470 1 STY493069	159.4 4.1 10991 1 AE005396 159.4 4.1 257071 1 AP002558 159.2 4.1 2470 1 STX493069	159.4 4.1 10991 1 AE005396 159.4 4.1 257071 1 AE002558 159.2 4.1 2470 1 STX493069 150.2 4.1 260.2 1 STX4930167	159.4 4.1 10991 1 AE005396 159.4 4.1 257071 1 AE002558 159.2 4.1 2470 1 STY493069 159.2 4.1 2692 1 STY289167	159.4 4.1 10991 1 AE005396 159.4 4.1 257071 1 AE002558 159.2 4.1 2470 1 STY493069 159.2 4.1 2692 1 STY289167	33 159.4 4.1 10991 1 AE005396 34 159.4 4.1 25771 1 AF002558 35 159.2 4.1 2470 1 STY293069 36 159.2 4.1 2692 1 STY299167	33 159.4 4.1 10991 1 AE005396 34 159.4 4.1 27071 1 AF002558 35 159.2 4.1 2470 1 STY493069 36 159.2 4.1 2692 1 STX289167	33 159.4 4.1 10991 1 AE005396 34 159.4 4.1 257071 1 AP002558 35 159.2 4.1 2470 1 STY493069 36 159.2 4.1 2692 1 STY289167 37 150.2 4.1 21140 1 AE008757
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159.4 4.1 10991 1 AE003596 159.4 4.1 257071 1 AP002558	159.4 4.1 10991 1 AE005395 159.4 4.1 257071 1 AE002558 159.2 4.1 2470 1 STY403069	159.4 4.1 10991 1 AEU03396 159.4 4.1 257071 1 AP002558 159.2 4.1 2470 1 STY493069	159.4 4.1 1291 1 AEU03358 159.4 4.1 257071 1 AE002558 159.2 4.1 2470 1 STY493069	159.4 4.1 1291 1 AEU03258 159.4 4.1 257071 1 AE002558 159.2 4.1 2470 1 STX493069	159.4 4.1 10991 1 AEU03396 159.4 4.1 257071 1 AP002558 159.2 4.1 2470 1 STY493069	159.4 4.1 10991 1 AEU03390 159.4 4.1 257071 1 AP002558 159.2 4.1 2470 1 STX493069 150 7 4 1 2602 1 STX989167	159.4 4.1 10991 1 AEU03396 159.4 4.1 257071 1 AP002558 159.2 4.1 2470 1 STY493069 159.2 4.1 2692 1 STY289167	159.4 4.1 10991 1 AEU03396 159.4 4.1 257071 1 AP002558 159.2 4.1 2470 1 STY493069 159.2 4.1 2692 1 STY289167	33 159.4 4.1 10991 1 AEU05390 34 159.4 4.1 257071 1 APO02558 35 159.2 4.1 2470 1 STY493069 36 159.2 4.1 2692 1 STY299167	33 159.4 4.1 1091 1 AEU05395 34 159.4 4.1 257071 1 AE00558 35 159.2 4.1 2470 1 STX493069 36 159.2 4.1 2692 1 STX289167	33 159.4 4.1 1091 1 AEU05395 34 159.4 4.1 257071 1 APO02558 35 159.2 4.1 2470 1 STY493069 36 159.2 4.1 2692 1 STY289167 37 150.2 4.1 2692 1 STY289167
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159.4 4.1 257071 1 AP002558	159.4 4.1 257071 1 AP002558	159.4 4.1 257071 1 AP002558 159.2 4.1 2470 1 STY493069	159.4 4.1 257071 1 AP002558 159.2 4.1 2470 1 STY493069	159.4 4.1 257071 1 AP002558 159.2 4.1 2470 1 STY493069	159.4 4.1 257071 1 AP002558 159.2 4.1 2470 1 STRY493069	159.4 4.1 257071 1 AP002558 159.2 4.1 2470 1 STY493069 150.2 4.1 260.7 1 STY493069	159.4 4.1 257071 1 AP002558 159.2 4.1 2470 1 STY493069 159.2 4.1 2692 1 STY289167	159.4 4.1 257071 1 AP002558 159.2 4.1 2470 1 STX493069 159.2 4.1 2692 1 STX289167	34 159.4 4.1 257071 1 AP002558 35 159.2 4.1 2470 1 STX493069 36 159.2 4.1 2692 1 STX289167	34 159.4 4.1 257071 1 AP002558 35 159.2 4.1 2470 1 STX493069 36 159.2 4.1 2692 1 STX289167	34 159.4 4.1 257071 1 AP002558 35 159.2 4.1 2470 1 STY493069 36 159.2 4.1 2692 1 STY289167 37 150 3 4 1 21140 1 AP008757
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/product="A militaen"
/product="A militaen"
/product="A militaen"
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FRYQDAIQPPDLIIAAVKPOPSEITGAATHHDTAMDFLSQOPSSLHALFWANSGHGIP
RSNRHYDGWGVHTFRLYTDEGNSTLVKFRWKTLQGRAGLWREAQALGGRNDPHRQD
LWANIESGNYPWEMEGLGFQLWREADGSKFDPDLLAGRAGSTRIPELIARPR
KSYRAFTEQIMFQPGHYWRGIDFTDDPLLAGRASSYLDTQLNRHGFLWRUPR
REFREDIMFQPGHYWRGIDFTDDPLLAGRASSYLDTQLNRHGFLWRUPR
IPPHNNNRDGAGOWFIPNTAAYTPNSMSNGFPQQNNRTHNRGFFTAGGRWYNGPLUR
ELSPSRNDYMSQFRWYNGPLUR
ELSPSRNDYMSQFRWYNGPLUR
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Location/Qualifiers

1. 3863-"Aplonyces capsulatus"
//strain-"AplcC25320"
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/db_xref-"ApCC25320"
/db_xref-"taxon:5037"
/dev_stage-"yeast phase"
/ordin<556. 793852. 1077,1168. 1583,1706. 1870,1950. 2
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OLRAAFNSANNKVDIVLVGSSLDPQRGVNWTYSGADGSIFDAVIVVGGLLTSRSTGYP
RGRPLRITIDAYAYGKPVGAVGDGSNEALRDVLWAAGGDASNGLDOPGVYISNDVSEA
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2016:666. .793,852. .1077,1168. .1583,1706. .1870,1950.
2208. .3115)
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Submitted (22-SEP-1997) National Center for Infectious Diseases,
Division of Bacterial and Mycotic Diseases, Mycotic Diseases
Branch, Centers for Disease Control and Prevention, 1600 Clifton
Rd., Atlanta, GA 30331, USA
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Zancope-Oliveira, R.M., Lott, T.J., Mayer, L.W., Reiss, E. and
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Infect. Immun. 67 (4), 1947-1953 (1999)
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Matches 3861; Conservative
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3480 ATCAGATATTATCTATCATGTTGTA	ا م	AGCCCGAGCTTCAACGACGTCTGGTCCCAACGCGTCTCTTCTACAA 2*0	Q O
	qa	2341 AGTGCGCGAGCTCAGCCCGAGCTTCAACGACGTCTGGTCCCAACCGCGTCTCTTCTACAA 2400	Ολ
3420 AGAGACAAATAATGATAGATTAACA	ζ	AACAGAGGATTCTTCACCGCACCTGGGCGTATGGTAAATGGACCACT 23	QΩ
61	· 원	CAACCGGACCCATAACAGAGGATTCTTCACCGCACCTGGGCGTATGGTAAATGGACCACT 234	Οy
	- Oy	GCCGCATATACACCCAACTCAATGAGCAACGGATTCCCACAACAAGC 228	qa
3301 GGTGTAACTATAATAATTATAATA	경 음	78	Qy
3241 AGCCGGTGTCAAGCTTCANGAGGCCC	음 , 참	TIGHTHINTHINTHINTHINTHINTHINTHINTHINTHINTHI	3 8
3240 AGCCGGTGTCAAGCTTCANGAGGCC7	δλ	THEACTCRAITGRATHTRATAGAGTATTAACATCCCCGTCTGCACAGGACAAATGTTCAT 22	3 8
181	ପ୍ର	2101 ATACAACAGCGGCGGGGGGAAAGTACTTCTCACCTACCAGGTGCAACTTCCATC 2100 2101 ATACAACAATGGGGAGGGGGGGGGGAACTACTTCTCACCATGTCAACATGTCAACTTCATC 2160	ර් පි
3180 ICTGTTTTTCCATCTTTGGTTGAGG	0y	ATCGCCATGGAGGTCCCCAACTTCGAGCAACTGCCGATCAACAGACCCCGCATCCAATTC	ପ୍ର
3121 GAGGTTGGGGCCCAAATATGGGTT	qa	ATCGCCATGGAGGTCCCAACTTCGAGCAACTGCGGATCAACAGAGCCCGGGATCCATTCC 21	Οy
120 GAGGT	o,	70	qq
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3001 GGACCAGCCCGGTGTGTATTICC	a è		1 A
3001 GGACCAGCCGGTGTGTATTTCCA	ζο 	NAATATTTCCACAGTTCCAACCAGGTCATGTAGTTCGCGGAATCG 198	2 2
	g 2	GCAGATCATGGT	δō i
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2881 GCTCAGGATTATTACGGATGCATACG	δο —	1741 CAAGTITGATTITGGATGTATTAGATGCCACCAAAATCATCCCAGAAGAACTIGTTGTTT 1800	ପ୍ର ପ
		CAAGITIGATITICGATCIATIAGATCCCACAAAATCATCCCAGAAGAACTIGITCCTIT 180	03
2761 TGATCCCCAACGCGGCGTGAACATGA	음 &		5 A
2761 TGATCCCCAACGCGGCGTGAACATGA	φ	1621 TGTTTCTCTGCTGTCGGTTGCTCTTTTTCTTTTTTTTTT	<u>අ</u> ,
1	qa	TGTTTCTCTGCTCTGTCGGTTGCTCTTTTCGTCTTTTTCTATATCTTCAACTAAGACTGA 16	QY
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SBI CIACCA	e :		q
	λ f	1501 AGGUTUTIGGGGAAAGAATCCCGAUTICCATCGACAAGACCTCTGGGATGCCATTGAAT 1560	ογ
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2521 CCTCGCCCGCCGCGTCGCCTAGCTA	o _y	TGGTCAAGTTTCGCTGGAAGACCCTCCAAGGAAGAAGGGGCGGCCTGGTATGGGAAGAG	6
	ପ୍ଧ	* 4	k d
2461 CGTGCGGAGTGAAACCGTGCGTAAGAA	VQ.	GCTCATTGCATGCCCTCTTCTGGGCAATGTCAGGACATGGAATCCCTCGCTCAATGC	Q
2401 CTCACTCACGTCTTCGAGAAGCAATT	- -	œ	οy
2401 CTCACTCACGGTCTTCGAGAAGCAATI	<u>*</u>		

TCCTTGTCCTTTGTAGCTGTTTAAATATAAGCCAAG 3419 3359 3360 AATGATACCTCAAAATGCCACACGACTTGCCTGATA 3539 3000 3240 CTAATTAATTTGAAGAGGAGGTTGAAGTGAAATCTT 3299 2940 3000 CTTGAATCGGTTCCCGTTGGATAGAAGCT-TGGTAT 3119 GTAATATTGCAGATATCAGTAAATTGCGTTTACGAA 3239 2760 2760 2820 2880 2940 2640 2700 2700 2580 2460 CCTTATGGCCGCTGGTGGGATGCGTCGAATGGGCT ACCTATTCCGGCGCCGACGGCTCGATCTTCGATGC CTTATGGCCGCTGGTGGGGATGCGTCGAATGGGCT ATCGCACCTTCGCCACGAATCTCCTGCGCGCTCGA ATCGGCGTCGAACCCCCATCCCCGGACCCAACCTT AACAAAGTAGATATCGTCCTAGTGGGCTCATCGCT CTCACTCACGGTCTTCGAGAAGCAATTCCTCGTCAACGCCATGCGCTTCGAAAACTCCCA AACGTCATCCAGCTGAACCGCGTCGACAACGA

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Johnson,C.H. and McEwen,J.E.
Johnson,C.H. and McEwen,J.E.
Submission
Submitted (14-MAY-2002) Medical Research & D.W. Reynolds Dept. of
Geriatrics, Central Arkansas Vet. Healthcare System & Univ. of
Arkansas for Medical Sciences, 4300 W. 7th St. (VAMC151/LR), Little
                                                                                                                                                                                                                                                                                                                      DNA linear PLN 13-AUG-2002
B (CATB) gene, complete cds.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           /note="large-subunit catalase; predicted mass 80,817 kDa.and isoelectric point 6.4; similar to Ajellomyces capeulatus M antigen encoded by GenBank Accession Number
                                TTGAATATTTATATGCTGTAAATGTAGGGAAGAGCGTACCATCCAAATAACCAGAAAAAC
                                                                       CTGACTATCTGATAAAATGTCTGTATTTCCGCTTCACGACGCATGTTATGACTTTCGAA
                                                                                                                                                          Ajellomyces capsulatus.
Ajellomyces capsulatus
Bukaryota; Fungi; Ascomycota; Pezizomycotina; Eurotiomycetes;
Onygenales; Onygenacee; Ajellomyces.
1 (bases i to 4807)
Johnson,C. H. and McEwen, J. E.
Characterization of the Histoplasma capsulatum gene for the
externally located catalase B enzyme
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2577. .2751,2835. .3739)
/gene="CATB"
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Location/Qualifiers
1. 4807
/organism-*Ajellomyces capsulatus"
/strain="G-2178"
/db_xref-"taxon:5037"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        917. .3954
/gene="CATB"
/gene="CATB"
2577. .2751,2835. .3954)
/gene="CATB"
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                                                                                                                                                                                                                                         /product="catalase B"
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DQFLSRYIDDGGSVLTTDVGGSIEDQHSLKAGNRGPTLLEDFIFRQKIQHFDHERVP
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PTKIIPEELVYFFTGCHVANDFRYFAAFTBQIMOPGHVYRGIDFTDDPLLD
PTKIIPEELVYFFTGCHVANDFRYFAAFTBQIMOPGHVYRGIDFTDDPLLD
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RNSHVRSETVRKNVIIQLRHVDNDLARRVALAIGVEPPSPDPFFYHNKTYPPIGTGT
NLARLDGKIALLTRADDGSFTIAEQLRAAFNSANNKVDIVLVGSSLDPQRGVNMTYSG
ADGSIFDAVIVVGGLLFSASTQY PRGRENERITTDAXXXGRPVGANGGSNEALRDVLM
AAGGDASNGLLDGSFYTYRSVLDGLTAXFRINRFPLDR*

AAGGDASNGLLDGSFYTYRSVLLGTAXFRINRFPLDR*
AAGGDASNGLLDGSFYTYRSVLLGTAXFRINRFPLDR*
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                                                                                                                                                                                                                                                                                68;
                                                                                                                                                                                                                                                    Length 4807;
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larity 95.2%; Pred. No. 0;
Conservative 0; Mismatches 118; Indels
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	1012 GTGTTGACTCTGCGGATATCCACGGATTTGCGACCCGTCTGTATACCGATGAAGGCA 1071 Db	1191 GTCTTCTTCACTACTACATTCATTCATTTGATTCACGCTGTCAAGCCGCAA 1250	CAGCAGCCCAGCTCATTGCATGCCCTCTTCTGGGCAATGTCAGGACATGGAATCC TCAATGCGTCATGTTGATGGGGGGGGGCGTCCATACCTTCCGACTTGTCACGACTGGAATCC TCAATGCGTCATGTTGATGGGTGGGGGGGTCCATACCTTCCGACTTGTCACCGACT TCAATGCGTCATGTTGATGGGTGGGGGGGTCCATACCTTCCGACTTGTCACCGGATG AACTCGACCTTGGTCAAGTTTTGCTTGGAAGACCCTCCCAAGGAAGAGGGGGGCCTGG AACTCGACCTTGGTCAAGTTTTGCTTGGAAGACCCTCCCAAGGAAGAGGGGGGCTTGTTTTTTTT	GAAGAGCACAGGCTUTGGCGGAAAAAATCCCGACTTCATCGAACAAACACTGGGGT 253 [GTTCTGACAGGGTTTCTCTGCTCTGTTCCGTTTTCGTTTTCTTTTTCTTTTCTTTTCTTTTCTTTTCTTTTCTTTT	247 247 190

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capsulatus

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Outsour, ....

Direct Submission
Submitted (01-APR-1999) Medical Research Dept. and D. W. Reynolds
Submitted (All APR-1999) Medical Research Dept. of Geriatrics, Central Arkansas Vet. Healthcare System and
Dilv. of Arkansas for Med. Sci., 4300 W. 7th St. (VAMCI51/LR),
Little Rock, AR 72205, USA
1 (bases 1 to 2608)
Johnson, C.H., Klotz, M.G., York, J.L., Kruft, V. and McEwen, J.E.
Redundancy, phylogeny and differential expression of Histoplasma
capsulatum catalases
Microbiology 148 (Pt 4), 1129-1142 (2002)
                                                                                                                                                                                                                                                           /note="similar to the sequence presented under GenBank
Accession Number AF026268"
                                                                                                                                                                                                                                                                                                                        /note="predicted mass 80,817 daltons; predicted isolated from the yeast growth
                                                                         2 (bases 1 to 2608)
Johnson,C.H. and McEwen,J.E.
The differential expression of two catalase isozymes
capsulatum during yeast phase growth
                                                                                                                                                                                                                                                                                                                                                                 /product="catalase B"
/protein_id="AAD33062.1"
/db_xref="GI:4927242"
                                                                                                                                                                                                                         /organism="Ajellomyces
/strain="G-2178"
/db_xref="taxon:5037"
/note="similar to the s
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Johnson, C.H. and McEwen, J.E.
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/gene="CATB"
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TITLE
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                                                                                              3791 CCTCCGCTTTTCTGATTTTCCATTTTTGATTGAGGTAATATTGCAGATATCAGTAAATT
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719 c 616 g 636 t
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Pred. No. 0;
0; Mismatches
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Best Local Similarity 83.3%;
Matches 2537; Conservative
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14-MAY-2002 cds.

2608 bp mRNA linear PLN catalase B (CATB) mRNA, complete

capsulatus

AF139985

DEFINITION ACCESSION VERSION

셤

Ajellomyces capsulatus AF139985 AF139985.1 GI:4927241

Ajellomyces capsulatus

KEYWORDS SOURCE ORGANISM

linear

Ajellomyces capsulatus Eukaryota; Fungl; Ascomycota; Pezizomycotina; Eurotiomycetes; Onygenales; Onygenaceae; Ajellomyces,

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584 544 5297 644 417 764 417 764 417 764 477 884 884 1124 731 1124 731 1124 739 1124 11364 869 11364 869 11364 869 11364
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24016(362. .646,713. .938,988. .1403,1489. .1653,1710. .1884,
1944. .2863)
/codon_start=1
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16.5%; Score 638.2; DB 8;
Best Local Similarity 60.1%; Pred. No. 4.1e-127;
Matches 1266; Conservative 0; Mismatches 708;
                                                                                                                                                                                                                                                                                                                 /evidence-experimental
939. .987
/number-2
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/number=4
/evidence=experimental
1654. .1709
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1885. .1943
             /db_xref="taxon:5085"
243. .249
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                                                                 /product="catalase"
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1710. .1884
/number-5
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/number=3
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/number=6
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/number=3
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                            PLN 30-SEP-1999
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Aspergillus fumigatus
Eukaryota; Fungi; Ascomycota; Pezizomycotina; Eurotiomycetes;
Eurotiales; Trichocomaceae; mitosporic Trichocomaceae; Aspergillus.
1 (bases 1 to 3106)
Takasuka,T., Sayers,N.M., Anderson,M.J., Benbow,E.W. and
Denning,D.W.
                                                                                                     GCTCGATCTTCGATGCCGTGATCGTCGTCGCGGCGGCCTCACGAGGGCCCTCAACGCAAT
                                                                                                                                                         GCGCCGTCGGTGACGGTAGCAATGAAGCCCTTCGTCACGTCCTTATGGCCGCTGGTGGGG
                                                                                                                                                                                       3164 TITITITITICCITITCGTTTTTCCAICTTGGGTGGTAATAITGCAGATATCAGT
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Submitted (04-SEP-1996) T. Takasuka, University of Manchester,
School of Medicine, Hope Hospital, Eccles Old Road, Salford, M6
8HD, UK
                                                                                                                                                                                                                                                                                                                                                                                               linear
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1. 3106
7. Grganism="Aspergillus fumigatus"
/strain="ArCC50240"
/isolate="AFI0"
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           CTGAGCGCGCCGTCCATGCTCGAGGAGCTGGTGCCCATGGCGTATTCACATCCTATAATA
                        CGAGCGTGCGGTCCATGCCGTGGTGCCGGCGCCCATGGAGTCTTCACTTCATATGGCG
                                                             976 TCGTGCGGTTTTCTACAGTCGCTGGTAGCAGAGGCAGTGTTGACTCTGCTCGCGATATCC
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                                                                                                      1036 ACGGATTTGCGACCCGTCTGTATACCGATGAAGGCAATTTTGGTAAGCATTATATCGTGG
                                                                                                                                             TAGTCATACTCATAACAGCACAACAATATGAATACAAACCCAGGACCTAGGCTGACTAC
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                                                                                                                                                                                            join(357. .695,762. .987,1037. .1452,1538. .1702,1759.
1993. .3061)
/gene="cat1"
                                                                                                                                                                                                                                                    .987,1037. .1452,1538. .1702,1759.
                  2 (bases 1 to 3142)
Latge.J.
Direct Submission
Submitted (15-ARR-1997) Laboratoire des Aspergillus, Institut
Pasteur, 25, rue du docteur Roux, Paris 75724, France
Location/Qualifiers
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Pred. No. 9.1e-127;
0; Mismatches 709; Indels 133;
                                                                                                                              M. Monod"
                                                                                        /organism-"Aspergillus fumigatus"
/strain-"cHUV 192-88"
/dLxref-"taxon:5085"
/clone_lib-"Lambda EMELS of M. Mor
/dev_stage-"young mycelium"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  803
                                                                                                                                                                                                                                        /product="catalase"
join(411. .695,762. .
1993. .2912)
/gene="cat1"
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179. 182
/gene="catl"
291. 298
/gene="catl"
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Best Local Similarity 60.0%;
Matches 1265; Conservative (
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      9 (bases 1 to 4271)
Wysong, D.R., Diamond, R.D. and Robbins, P.W.
Direct Submission
Submitted (26-FBB-1997) Center for Cancer Research, Massachusett
Institute of Technology, 77 Massachusetts Avenue, Cambridge, MA
02139, USA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         564 AGATGCCTAGCGGTCAGAAAGGCCCCCTCGATCGCCGCCATGACACTCTCTCCGACCCTA
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2209. .2383,2443. .>3362)
/gene="CatB"
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2209. .2383,2443. .3362)
/gene="CatB"
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1larity 59.8%; Pred. No. 1.1e-126;
Conservative 0; Mismatches 713;
                                                                                                                                                                                                 /organism="Aspergillus fumigatus"
/db_xref="taxon:5085"
                                                                                                                                          Sequence and feature updates by submitter Location/Qualifiers
1. .4271
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/db_xref="GI:1857716"
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/gene="CatB"
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Matches 1259; Conserv
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Aspergillus fumigatus
Eukaryota; Pacipacus
Eukaryota; Fungi, Ascomycota; Pezizomycotina; Eurotiomycetes;
Eurotiales; Trichocomaceae; mitosporic Trichocomaceae; Aspergillus.
1 (bases 1 to 4271)
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Wysong,D.R., Diamond,R.D. and Robbins,P.W.
Wysong,D.R., Diamond,R.D. and Subbins,P.W.
Submitted (300-7AN-1997) Center for Cancer Research, Massachusetts Institute of Technology, 77 Massachusetts Avenue, Cambridge, MA
2201 CGAGAAGCAGTTCGTTATTGACGCCATCCGCTTCGAAAATGCAAACGTTAAATCTCCCGT
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Molecular cloning and sequencing of a second catalase gene in
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Unpublished
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                             220;
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                           Mismatches
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                       Conservative
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                                                                                                                                       CCGCGTCGCGCTAGCTATCGGCGTCGAACCCCCATCCCCGGACCCAACCTTCTACCACAA 2589
                                                                                                                                                                Aspergillus niger DNA.
Aspergillus niger
Aspergillus niger
Eukaryota; Fungi; Ascomycota; Pezizomycotina; Eurotiomycetes;
Eukaryota; Fichocomaceae; mitosporic Trichocomaceae; Aspergillus.
1 (bases 1 to 3105)
Fowler,T., Rey,M.W., Vaha-Vahe,P., Power,S.D. and Berka,R.W.
The catR gene encoding a catalase from Aspergillus niger: primary structure and elevated expression through increased gene copy
                                                                                                                                                                                                                                                                                                                                                                                                                                                    PLN 13-JUN-1995
2470 TGAAACCGTGCGTAAGAACGTCATCAGCTGAACGGCGTCGACAACGACCTCGCCCG
                                                                                CAAGGCAACCGICCCCAICGGCACCIICGGCACGAAICICCIGCGGGICGACGGGCIGAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   /evidence=not_experimental
Join(327. .620,683. .908,970. .1385,1440. .1604,1654.
/gene="catR"
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Gene="catR"
                                                                                                                                                                                                                                                                                                                                                                                                                                              Aspergillus niger catalase (catR) gene, complete cds. L15474.1 GI:403073
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No. 4.5e-84;
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1. .id.
Gorganism="Aspergillus niger"
Ab_xref="taxon:5061"
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Mol. Microbiol. 9 (5), 989-998 (1993)
95040642
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/gene="catR"
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Source

FEATURES

gene

CDS

JOURNAL MEDLINE PUBMED

ACCESSION VERSION KEYWORDS SOURCE ORGANISM

REFERENCE AUTHORS TITLE

DEFINITION

RESULT

1149

962

1191

1371

BASE COUNT ORIGIN

849 680 740

1694	OY 2049 GGAGGTCCCAACTICGAGCAACTGCCGATCAACAGAC	Qy 2109 AATCGCGACGGTGCTGGTAAGCTACTTCTCACCTACC. Db 1814 AACCGTGACG	OY 2169 ATCGATTTGTATAGAGTATTAACATCCCCGTCTGCAC	QY 2229 ACACGCCGCATATACACCCAACTCAATGAGCAACGG DD 1851 ACACCTGCGTAACACCCCAACACGCGAACGGCTAACACACCCAACAACAACAACAAAAAAAA		QY 2349 AGCTCAGCCCGAGCTTCAACGACGTCTGGTCCAACCC	QY 2409 CGGTCTTCGAGAAGCAATTCCTCGTCAACGCCATGCGC	Qy 2469 GTGAAACCGTGCGTAAGAACGTCATCATCCAGCTGAAC	9y 2529 GCGGGTCGCGCTAGCTATCGGCGTCGAACCCCATCC	OY 2589 ACAAGGCAACGTCCCCATGGCACTTCGGCACGAAT	OY 2649 AAATGGCCTCCTGAC 2664		SION	catt gene; catalase. ergot fungus SM Claviceps purpurea Eukaryota; Pungi; Ascomycota;	Hyporreales; Clavicipitaceae; Claviceps. REFERENCE 1 (bases 1 to 4616) AUTHORS Tudzynski, P. TITLE Direct Submission			PEATURES Coction/Qualiflers Source 14616 /organism="Claviceps purpurea"
910 ATAATAACTGGTCGAATATCACAGCCGCATCCTTCTTGAACGCGGCAGGAAAGCAGA-CA 968 	969 CCAGTATICGIGGGGTITICIACAGTGGTAGAGAGCAGIGITGACTGTGCTCGC 1028	1029 GATATCCACGGATTGCGACCCGTCTGTATACCGATGAGGCAATTTTGGTAAGCATTAT 1088	CCTAGGC	TGACTACTGGGCAATGTAGGTCACCGAACAACAACGTTCAATACATGCTAACAGATATGTC TGACTACTGGGCAATGTAGATATCGTCGGAAACAACGTTCCAGTCTTCTTCATTCA	GCRATCAATTCCCTGATTTGATCAAGCCGCAACCAGGACCAGGACCAGGACCAGGACCAGCACCAACTTCTTCATTCA	1269 CAGGCTGCAACTGCACATGATACGCCATTGCTTTCCTCAGCCAGC						1629 TGCTCTGTCGGTTGCTCTTTTTCTATATCTTCAACTAAGACTGACT				TGGTTGGTCCACCCCTATATATTGGAATATGAATACATGTATAGCTAGATGAGCGTG TGGTTGGTCCACCCCCTATATATTGGAATATGAATACATGTATAGCTAGATGAAGCGTA TGTTATGAATGAATATATATATTGGAATATGAATACATGTATAGCTAGATGAAGCGTA	TATCTAAATATATTCCACAGTTCCAACCAGGTCATGTAGTTCGCGAATCGCA [1989 GATGACCCTTTGCTTCAGGGCCGCTTGTACTCCTTGACACTCGAATTGAATCGCCAT 2048
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CAGACCCGCATCCCATTCCATAACAAC 2108 TACCATGICAACTICCATCTIGACCCA 2168 AACGGATTCCCACAACAAGCCAACCGGA 2288 GCACAGGACAAATGTTCATCCTCTAA 2228 GTATGGTAAATGGACCACTAGTGCGCG 2348 1823 GCTACGCTTCCGGCCATCTCGTCGCC 1970 CGAATCTCCTGCGGCTCGACGGGCTGA 2648 | | |||| | | ||| || ||| AGCCCTCCTCGAGGATCGAGGGTCTGC 2270 TGAACCGCGTCGACAACGACCTCGCCC 2528 DNA linear PLN 25-MAY-1998 ete cds. ?. :ed disruption of cpcati, coding of Claviceps purpurea , Institut fuer Botanik, Schlossgarten 3, Muenster, omycotina; Sordariomycetes;

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1553 CATTGAATCTGGAAGGTACCCTGAGTGGGAGGTAAGATATGATTCCCCCAAATCATTAGT 1612
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1313 GCAGCCCAGCTCATTGCATGCCTCTTCTGGGCAATGTCAGGACATGGAATCCCTCGCTC 1372
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     2288 GCTTGTGAGCACGAGACTGTGATGTGCAAGAAGACAATCGTCCATGCTGACCAGGTGCTG 2347
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                2348 CTTCGTTGACAGGTATACCGACGACGACATCGATATCGATGGCAACAATACTTCGTTGATATCGTTGGAAAATGTTCCTGT 2407
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1044 GCGACCCGTCTGTATACCGAT---GAAGGCAATTTTGGTAAGCATTATATGGTAGTG 1100
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                                                                                                                             GCCGTCCATGCTCGAGGAGCTGGTGCCCATGGCGTATTCACATCCTATAATAACTGGTCG 923
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                                                                1808 TICGAAGTCGACGACGCGAGGCTACCTGACGTCGACGTCGGTGGCCCAATCGAGGAT
                                                                                                                                                                         764 CAGAAGATTCAACACTTTGATCATGAGGGTATGTAGATACAAAATATGTGACCGTGTT
                                              704 CAACACCAGCCTGAAGGCTGGAAATAGAGGCCCAACTCTACTTGAGGATTTTATCTTCGC
                                                                                                                                                                                                                                        ----CCGCTAATTCAATTTACGCAGGTTCCTGAGCGC
                   Gaps
Pred. No. 2.8e-69;
0; Mismatches 939; Indels 136;
      Best Local Similarity 52.3%;
Matches 1180; Conservative
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ATLIVGVLASTASKNSLAQAQALKDAFKTREVNVIVVAESLATGVDQTYDAADAVSFD
GIVVADGVEALFDNTKKSSLFQPGRPSQIVNDGYNWGKPWGFLGSAKRAVKATSVVEG
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TOINRHGGPNFEOLPINRPYVPIHNNNRDGAGONFIHKNNAPYTPNTLNKGFFROANO
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                                                                                                                                                                                                                                                                                                                          AVRLYTDEGNFDIVGNNVPVFFIQDAIQFPDLIHSVKPRQDNEIPQAATAHDSAWDFF
SQQTSTLHTLFWAMAGYGIPRSLRHMDGFGVHTYRLVTDDGTSKLVKWHWKSKQGKAS
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1192

2167

2686

DB 8; Length 4616;

Score 370.6;

9.68;

Query Match

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Botryotinia fuckeliana catalase (cat2) gene, complete cds.
AF243853
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                                  630 AGTITCTTAGCAAGTITTACATTGACGATGAACAGTCGGTGCTAACAACGGACGTGGTG
                                                                                                                                                                                        Botryotinia fuckeliana.
Botryotinia fuckeliana
Botryotinia fuckeliana
Eukaryota; Fungi; Ascomycota; Pezizomycotina; Leotiomycetes;
Helotiales; Sclerotiniaceae; Botryotinia.

( bases 1 to 2460)
Schouten,A., Vermeer,J.E.M. and van Kan,J.A.L.
Direct Submission
Submitted (10-MAR-2000).Laboratory of Phytopathology, WUR,
Binnenhaven 9, Wageningen 6709 PD, The Netherlands
                                                                                                                                                                                                                                                                                                                                                         <1. .>2460
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john(1. .279,330. .363,414. .605,659. .1239,1402.
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Pred. No. 5.6e-66;
); Mismatches 778;
                                                              GGCTCGATCTTCGATGCCGTGATCGTCGTCGGCGG
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Best Local Similarity
Matches 1103; Conserv
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DEFINITION
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KEYWORDS
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                   -CGGCAAGAATGCCGACTACCACAGACAGGATCTCTTCGACGCCATCCAGTCGGGCAACT 2854
                                                                                                                                                   GAAACTGAGCAGATCATGGTTGGTCCACC------CCCTATATATTTGGAATATGAA 1903
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                                                                            GATCAATCCAAGTTTGATTTCGATCTATTAGATCCCACAAAATCATCCCAGAAGAACTT
                                                                                                         GITCCITICACCCCAAICGGAAAAAIGGTCTIGAACCGAAACCCAAAAAGTTAITIGCC
                                                                                                                                                                3076 AGCTICAGITAGGGAAATCCGTTTGCTTACCAACTICAATTAACAGTTCCAACCTGGCCA
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Length 2460;

1266 A	AY027544 LOCUS LOCUS LOCUS LOCUS LOCUS LOCUS AY027544 LOCUS LOCUS LOCUS AY027544 AY027544 AY027544.1 GI:1327200 KEYWORDS SOURCE Neurospora crassa ORGANISM Neurospora crassa SOURCE Neurospora crassa SOURCE Source Locus Source Source Source Locus Source Source Source Source Source Source Locus Source Sou
TITTATECTECCGCAGAAGATTCAACATTGATCATGAGGGGTATCGATACTAAA 8	1608 TTAGTCTGACAGTGTTTCTCTGCTCTTTTCGTCTTTTCTATATTT 1667 1099 GAAGATGTGTTGAAGTTTGGAT. 1099 GAAGATGTGTTGAAGTTTGGAT. 1099 GAAGATGTGTTGAAGTTTGGAT. 1668 CAACTAAGACTGAAGTTTGGAT. 1169 CAACTAAGACTGAAGTTTAGTTCCATATAGCTGGGGTTTCAATTGGTGATG 1727 1119 TCCTGAAGAGCTTGTTCCAAGATTGGAGTCATGAGATTAAATGCCAATCC 1205 1728 AAGCAGATCAATCAATGATTGATTCGATCTATAGATCCCACAAAATCCTGCAAGAG 1787 1206 TCGAAATTACTTCGCGGGAAACAGTATGGTAAGAGATTTTCTGCATCCTGAAAG 1265 1788 AACTTGTTCCCTTTCACCCCAATCGGAAAAATGGTCTTGAACCGAAAACGTATT 1847

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         1222 CTGATTTGATTCACGCTGTCAAGCCGCAACCAGACAGTGAAATTCCCCAAGGCTGCAACTG 1281
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                                                    ATATG-----TGACCGTGTTGCAAATCCGCTAATTCAATTTT--ACGCAGGTTCCTGAGC
                                                                 CATGGCCCAATTAGCATCAAGAAACCTAGCTAACGAAAGTTTGATACCAGATTCCCGAGA
                                                                                            GCGCCGTCCATGCTCGAGGAGCTGCTGCCCATGGCGTATTCACATCCTATAATAACTGGT
                                                                                                                                     CGAATATCACAGCCGCATCCTTGAACGCGGCAGGAAAGCAGACACCAGTATTCGTGC
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/note="alternative transcription start site determined by
  Neurospora crassa Catalase-3 during Development and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          688
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                            Daldwin, J., Michan, S., Natvig, D. and Hansberg, W.
                                                                                                                                                                                                                                                                                                                                                                                                  /note="large monofunctional catalase"
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join(257. .541,607. .809,873. .2544)
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tive 0; Mismatches 779;
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6. .2767
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                                                                                                                       AJ011309.1 GI:12054760

S catB gene; CATB protein.
Podospora ansertina.
ISM Podospora ansertina.

Eukaryota; Fungi; Ascomycota; Pezizomycotina; Sordariomycetes; Sordariales; Lasiosphaeriaceae; Podospora.

El (bases 1 to 3154)

Cloning and molecular characterization of two catalase genes of podospora anserina

L Unpublished

E 2 (bases 1 to 3154)

S Osiewacz, H.D.

S Osiewacz, H.D.

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2346 TACTGATGGTTACCGCTGGGGTAAGCCCGTTGCTGCCGTCGGCAGCGCCCAAGAAGG 2401
                                                                                                                                                                                                                                                                                                                                                                                                              Direct Submission
Submitted (16-SEP-1998) Osiewacz H.D., Botanisches Institut,
Wolfgang Goethe-Universitaet, Marie-Curie-Str. 9, D-60439
                                                                                                 PLN
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Pred. No. 3.7e-56;
); Mismatches 307;
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/protein_id="CAC20749.1"
/db_xref="G1:12054761"
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/gene="catB"
/number=1
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/gene="catB"
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Best Local Similarity 60.1
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                                                                       Blumeria graminis.
Blumeria graminis
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Blumeria graminis
Butaryota; Fungi; Ascomycota; Pezizomycotina; Leotiomycetes;
Erysiphales; Erysiphaceae; Blumeria.
1 (bases 1 to 2875)
Zhang, 2. and Gurr, S.J.
Isolation and characterization of a Blumeria graminis catalase gene involved in antioxidant action in barley/powdery mildew
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           join(<302. . 589,638. .671,719. .910,967. .1547,1595. .1640,
1692. .>2707)
/gene="Cat1"
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2010,302. .589,638. .671,719. .910,967. .1547,1595.
1692. .3707)
/gene-"Cat1"
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          complete cds
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Pred. No. 1.4e-50;
0; Mismatches 335; Indels 7
                                                                                                                                                                                                                                              Unpublished
2 (bases 1 to 2875)
2hang, Z. and Gurr, S.J.
Direct Submission
Submitted (11-DEC-2000) Department of Plant & Oxford, South Parks Road, Oxford Oxl 3RB, UK
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  /note="hydrogen peroxide scavenger"
    graminis catalase (Cati) gene,
                                                                                                                                                                                                                                                                                                                                                                                                          /organism-"Blumeria graminis"
/Specific_host-"barley"
/db_xref-"taxon:34373"
/302. . . 2707
/gene="Cat1"
                                         AF327335.1 GI:18033100
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  Blumeria
AF327335
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Matches 588
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- nucleic search, using sw model OM nucleic June 11, 2003, 15:32:45 ; Search time 801 Seconds (without alignments) 10857.949 Million cell updates/sec Run on:

US-09-674-195C-1 3862 Title: Perfect score:

1 ggatcctgctggctccgata.....aacaccttcaaaaaggatcc 3862

Scoring table: Sednence:

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Searched:

Total number of hits satisfying chosen parameters:

2185239 seqs, 1125999159 residues

Minimum DB seq length: 0 Maximum DB seq length: 200000000

Post-processing: Minimum Match 0% Maximum Match 100% Listing first 45 summaries

Database:

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Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution. /SIDS2/gcgdata/geneseq/geneseqn-embl/Na2000.DAT:*
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/SIDS2/gcgdata/geneseq/geneseqn-embl/Na2001B.DAT:*

SUMMARIES

Description	Histoplasma capsul	Construct EC2L (Co	Aspergillus niger	catR gene. Asperg	Aspergillus oryzae	Scytalidium catala	Aspergillus oryzae	Bacillus lichenifo	Catalase kat HP11
OI	AA235972	AAQ46249	AAQ46248	AAQ48459	AAF13196	AAT42791	AAF13317	ABK74731	AAZ88047
DB	21	14	14	14	21	17	21	24	20
Query Match Length DB ID	3862	8528	3108	3108	1186	2794	1185	2037	3466
Query Match	100.0	11.2	11.0	11.0	7.2	6.5	6.2	4.2	4.1
Score	3861	433.4	424.8	424.8	279.4	249.2	240.2	164	159.4
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ALIGNMENTS

AAZ35972 standard; DNA; 3862 BP 09-FEB-2000 (first entry) AAZ35972;

RESULT 1 AAZ3597 Histoplasma capsulatum M antigen gene SEQ ID NO:1.

Histoplasma capsulatum; fungus; M antigen; vaccine; detection; histoplasmosis; diagnosis; infection; antimicrobial; antibody; ss.

Histoplasma capsulatum

W09955874-A2.

04-NOV-1999.

99WO-US09151. 27-APR-1999; 98US-0083676. 30-APR-1998; (USSH) US DEPT HEALTH, & HUMAN SERVICES.

Reiss E, Mayer LW, Lott TJ, Zancope-Oliveira RM, WPI; 2000-023360/02. P-PSDB; AAX56136.

Deepe GS;

New isolated Histoplasma capsulatum nucleic acids, used to develop products for the diagnosis, prevention and treatment of histoplasmosis

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               The present sequence represents the M antigen gene isolated from Histoplasma capsulatum (HC). HC polypeptides can be used for detecting antibodies for detecting a previous or current HC infection in a subject. They can also be injected into the skin of a subject to detect past exposure to HC by detecting swelling of the skin. The antibodies can be used for detecting current HC infection in a subject. HC nucleic histoplasmosis as well as in vaccines for the prevention of
                                                                                                                                             TITIATITICATICATCTICTCTGTGGCAACATGCAGGTATGCGAGCTCTGGACCCTGG
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                                                                                                                   Length
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                                                                                                  G; 1028 T; 1 other;
                                                                                                                  DB 21;
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                                                                                                                ;; Score 3861; I
;; Pred. No. 0;
0; Mismatches
                                                                                                  838
   English
                                                                                                BP; 984 A; 1011 C;
                                                                                                              Query Match 100.0%;
Best Local Similarity 100.0%;
Matches 3862; Conservative 0
                                                                                                3862
                                                                                                Sequence
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1028 CGATATCCACGGATTTGCGACCCGTCTGTATACCGATGAAGGCAATTTTGGTAAGCATTA 1087
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          AIGGIICGICCACCCCTAIAIAITIGGAAIAIGAAIACAIGIAIAGCIAGAIGAAGCGI 1927
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                                                                                                  908 CTATAATAACTGGTCGAATATCACAGCCGCATCCTTGTAGAACGCGGCAGGAAAGCAGAC
                                                                                                                                                   968 ACCAGIATICGIGGGGITITCIACAGICGCIGGIAGCAGAGGCAGIGIIGACICIGCICG
                                                                                                                                                                          2425 cccrargricicaccerroracreregreserricereseracreracreses
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                                                                                                                                                                                                                                                                                                   2636 CGCCATCCAGTTCCCCGATCTTGTCCACGCCATCAACCCATGAGATCACCC
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1748 GATTTCGATCTATAGATCCCACCAAAATCATCCAGAAGAACTTGTTCCTTTCACCCCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                3108 GGCITCGACCITCIGGATCCCACCAAGTIGGICCCCGAGGAGGITGICCCTIACACICCI
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         732 GCCCAACTCTACTTGAGGAFTTTTATCTTCCGCCAGAAGATTCAACACTTTGATCATGAGA 791
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          GGGTATGTAGATACA----AAATATGTGACCGTGTTGCAAATCCGCTAATTCAATTTTAC 847
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Indels 214; Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             The Aspergillus niger catR gene was identified and isolated. The native promoter of the gene was removed and replaced with the Aspergillus glucoamylase promoter gene. This modification allows increased expression of the catR gene without the need to supply hydrogen peroxide to induce expression. Cells into which this construct is inserted preferably have the glucose oxidase gene (goxA) deleted. This deletion minimises the generation of glucomate waste material and the use of waste treatment processes.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Aspergillus niger catR gene sequence – from which catR promoter has been deleted and Aspergillus glucoamylase promoter gene has been inserted
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Ouery Match 11.2%; Score 433.4; DB 14; Length 8528; Best Local Similarity 55.9%; Pred. No. 7.6e-108; Matches 1117; Conservative 0; Mismatches 666; Indels 214;
                                                                                                                                                                          4433..4440
/*tag= e
/label= Linker sequence.
4441..6093
/*tag= f
/label= glaA polyadenylation and termination
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Sequence 8528 BP; 1951 A; 2321 C; 2209 G; 2047 T; 0 other;
                                                                                                                             /*tag= c
/label= catR coding region
                                                                                      /*tag= b
/function= GlaA promoter.
                                                      *tag= a
'label= Linker sequence.
                                                                                                                                                                                                                                                                                                                               /label - Linker sequence.
                             Location/Qualiflers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Disclosure; Figure 3; 43pp; English.
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/label= pyrG gene.
8511..8528
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92US-0846181.
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/*tag= d
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                                      misc_feature
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04-MAR-1992;
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/note= "Guanine residue may be incorrectly inserted into the sequence since the open reading frame is disrupted and the number of bases in the sequence is one more than that quoted in the specification"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                native promoter of the gene was removed and replaced with the Aspergillus glucoamylase promoter gene. This modification allows increased expression of the catk gene without the need to supply hydrogen peroxide to induce expression. Cells into which this construct is inserted preferably have the glucose oxidase gene (goxA) deleted. This deletion minimises the generation of gluconate waste material and the use of waste treatment processes.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Aspergillus niger catR gene sequence - from which catR promoter has been deleted and Aspergillus glucoamylase promoter gene has
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Score 424.8; DB 14; Length 3108; Pred. No. 9.5e-106;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Aspergillus niger catR gene was identified and isolated
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Sequence 3108 BP; 674 A; 955 C; 708 G; 769 T; 2 other;
                                                                                                                                                                                                                                                                                                                                                                                                                         Leu.
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/note= "IGC encodes Trp.
                                                                                                                                                                                                                                                                                                                                                                                                                        /note= "GTC encodes
                                                                                                                                                                                                         1606..1654
/*tag= h
/label= Intron 4.
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                                                                                     label Intron 2.
                                                                                                                                                              Intron 3.
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/label= Exon 3.
1387..1440
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label= Exon 4.
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         '*tag= b
'label= Intron
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54.8%;
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label= Exon
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92US-0846181.
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                                683..908
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Best Local Similarity
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04-MAR-1992;
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 ---CAAATGCC 3257
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ACCCATAACAGAGATTCTTCACCGCACCTGGGCGTATGGTAAATGGACCACTAGTGCGC
                                                                                                                                                                                                                                                                                                                       AGTGAAACCGTGCGTAAGAACGTCATCATCCAGCTGAACCGCGTCGACAACGACCTCGCC
                                                                                                                                 2408 ACGGICITICGAGAAGCAAITCCICGICAACGCCAIGCGCITCGAAAACICCCACGIGCGG
                                  1988 GGATGACCCTTTGCTTCAGGCCGCTTGTACTCCTTACCTTGACACTCAATTGAATCGCCA
                                                                                 2168 AATCGATTTGTATAGAGTATTAACATCCCCGTCTGCACAGGACAAATGTTCATCCCTCTA
                                                                                                                                                                                                                                                            AACACGGCCGCATATACACCCCAACTCAATGAGCAACGGATTCCCCACAACAAGCCAACGG
                        ATATCTAAATATATTTCCACAGTTCCAACCAGGTCATGTAGTTCGCGGAATCGATTTCAC
                                                                                                                    2048 TGGAGGTCCCAACTTCGAGCAACTGCCGATCAACAGACCCCGCATCCCATACCAA
                                                                                                                                                                                       3438 CAACCGTGACGCTTCGGCCAGCAGC-------
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Aspergillus niger; catalase; catR; hydrogen peroxide;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Aspergillus niger catR gene and flanking regions.
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   GGTGTATGTATTCCCCATTCAT-
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            2648 AAAATCGCCCTCCTGAC 2664
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A TROCGGTGGCTGAAGCTTATAGTCGCCTGGGGGGTGTTGTTTCGCAGCTGTCCTTCCT	494 ATTCGGGTGGAGGTGAAGCTTATACTGGCGTGGGGGGTGTTGTTTCTCCAGCCTGTCCCTT 327 ATCCGGGGGAGATGCCTTTGCAGCTGTTGTTGTTTTTTTT	GCAGCCTGTCCTAC 553	61	GATACCATT 440		ACCGGTAGCTACATG 500	SCTGGAATAGAGGC 733 				 AGTGGTTTTCAATT 680	CGTATTCACATCCT 909	TACTTTCAAATCCT 740	AGGAAAGCAGA-CA 968 			TTGGTAAGCATTAT 1088	ATGGTA 912	CCCAGGACCTAGGC 1148			ACAGTGAAATTCCC 1268				GCGTCATGTTGAT 1388 CCGCCACATGAAC 1191		 CAAGGTGCGA 1251	GGCACAGGCTCTT 1508	AGCTCAGGCCGCT 1311
	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	CTCAAGCTTATACTCGCCTCGGCGGGTGTTGTTCT 	GAGATGCCTAGCGGTCAGAAAGGCCCCCCTCGATCGC	GAAATGAGTTTCACCCAGGAGCAGGACAATGCTGGC	ACGGACCAGTTTCTTAGCAAGTTTTACATTGACGAT(omonomic in the control of the contr	GTGGTGGTCCCATCGAGGACCAACACAGCCTGAAGG 	CTTGAGGATTTTATCTTCCGCCAGAAGATTCAACAC	TIGGAGGACTITATCTICCGICAGAACTICAGGGG	TACAAAATGTGACCGTGTTGCAAATCCGCTP		AGGGGGCGTCCATGCTCGAGGAGCTGGTGCCCATGC	Necestaticates de la constante	GGTCGAATATCACAGCCGCATCCTTCTTGAACGCGC 	3TGCGGTTTTCTACAGTCGCTGGTAGCAGAGGCAGTG		GATTTGCGACCCGTCTGTATACCGATGAAGGCAATT	GTCACGCTTGTCGGTTCTACACTGACGAGGGTAACT	TCATACTCATAACAGCACAACAAATATGAATACAAA 	ついこう こうしょう こうしゅう こうしゅんしん かいしゅん ないい	SCAMIOTAGATATICATCGGAAACAACGTICCAGTCTT	TCCCTGATTTGATTCACGCTGTCAAGCCGCAACCAG		CTGCACATGATACGGCATGGGATTTCCTCAGCCAGC 	TCTGGGCAATGTCAGGACATGCAATATCTTCTTCTTCTTCTTTTTTTT	TGTGGCTGATCTGGTAACGGTATCCTCGGTCAAT	TCCATACCTTCCGACTTCTCACCGACGAGGCGAACTC		NGACCCTCCAAGGAAGAGGGGCCTGGTATGGGAAGA	AGTCCCAACAGGGTGTTGCCAGTCTGGTGTGGGATGA
		A I I					-															GCTATTCAAT	GCCATCCAGT	CAGGCTGCAA CAGGCCGCTA	CATGCCCTCT	CACAGTGCCT	GGGTGGGGCG	GGCTACGGAG	TTTCGCTGGA	ACACCTTGGA

ογ	26	TACCCTGAGTGGGAGGTAAGATATGATTCCCCCAAATCATTAGTTCTGACAGTGTTTCTC 1628
d Q	1372	TACCCGAAA
0y	1629	TGCTCTGTCGGTTGCTCTTTTCGTCTTTTCTATCTTCAACTAAGACTGACT
qq	1395	 TTT 142
οy	1689	174
qq	1424	00
	1749	180
qq	1484	54
Qy	1809	186
qq	1544	160
οy	1869	TGGTTGGTCCACCCCTATATATTTGGAATATGAATACATGTATAGCTAGATGAAGCGTA 1928
අු	1604	GIGTATGTATTCCCCATTCATCAAATGCCA 1633
δy	1929	TATCTAAATATATTTCCACAGTTCCAAGCAGGTCATGTAGTTCGCGGAATCGATTTCACG 1988
qq	1634	GACATAATCTAACTTCTGCAGTTCCAACCCGGTCACGTCGTTCCTGGCATTGACTTCACC 1693
οy	1989	GATGACCCTTTGCTTCAGGGCCGCTTGTACTCCTACCTTGACACTCAATTGAATCGCCAT 2048
qq	1694	ın.
oy	2049	210
අු	1754	181
οy	2109	216
QQ	1814	
. σу	2169	ATCGATTTGTATAGAGTATTAACATCCCCGTCTGCACAGGACAAATGTTCATCCCTCTAA 2228
qq	1824	85
οy	2229	228
qq	1851	91
Qy	2289	234
qq	1911 (97
δλ	2349	AGCTCAGCCCGAGCTTCAACGACGTCTGGTCCCAACGCGTCTTTTTACAACTCACTC
qq	1971	3
Vo	2409 (CGCTCTTCGAGAAGCAATTCCTCGTCAACGCCATGCGCTTCGAAAACTCCCACGTGCGGA 2468
DD .	2031 1	TCCCGGCTGAGCAGCAGGATGGTTGTCAACGCCATTGTGTTGAGAACTCCAAGGTTAACA 2090
οy	2469	FIGARACCGTGCGTAAGAACGTCATCATCCAGCTGAACCGCGTCGACAACGACCTCGCCC 2528
qq	2091	15
δy	2529 G	SCCGCGTGCGCTATCGCCGTCGAACCCCCATCCCGGACCCAACCTTCTACCACA 2588
qq	2151 T	~
δ	83	CAAGGCAACCGTCCCCATCGGCACCTTCGGCACGAATCTCCTGCGGCTCGACGGGCTGA 2648
Q Q	2211	CCAACAAGACTCCAACGTCGGTACCTTCGGCAAGCCCCTCAGCATCGAGGGTCTGC 2270

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CCAGTATTCGTGCGGTTTTCTACAGTCGCTGGTAGCAGAGGCAGTGTTGACTCTGCTCGC 1028
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                                                                                                                                                                                                                                                                                                                                                                387 CTGTCGGGTGAAATGAGTTTCACCCAGGAGAGAGAATGCTGGC-----GATACCATT 440
                                                                                                                                                                                                                                                                                         494 ATGCGGTCGCTCAAGCTTATACTCGCCTCGGCGGGTGTTGTTTCTGCAGCCTGTCCCTAC 553
                                                                                                                                                                                                                                                                                                        554 ATGTCAGGGGAGATGCCTAGCGGTCAGAAAGGCCCCCTCGATCGCCGCCATGACACTCTC 613
                                                                                                                                                                                                                                                                                                                                                                                       TCCGACCCTACGGACCAGTTTCTTAGCAAGTTTTACATTGACGATGAACAGTCGGTGCTA 673
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1089 ATCGTGGTAGTCATACTCATAACAGCACAAAAATATGAATACAAACCCAGGACCTAGGC
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                                                                                                                                                                                                                                                                                                                                                                                                                                                621 GTAAGTACAGTAACTGCTGCTGTGTAGTAACAATAAATTGACCCAGTGGTTTTCAATT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               850 AGGTTCCTGAGCGCGCCGTCCATGCTCGAGGAGCTGGTGCCCATGGCGTATTCACATCCT
                                                                                                                                                                                                                                                                                                                                                                                                                441 GAGGTCACGGAGCAGCCCATTGACAACACCCTGTATGTCAATGACACCGGTAGCTACATG
                                                                                                                                                                                                                                                                                                                                                                                                                                     674 ACAACGGACGTGGTGGTCCCATCGAGGACCAACACAGGCTGAAGGCTGGAAATAGAGGC
                                                                                                                                                                                                                                                                      Gaps
                                                                                               This sequence represents the catR gene of A. niger and encodes the catalase-R protein. This enzyme catalyses the conversion of hydrogen peroxide tro oxygen and water. Catalase-R is a soluble extended shelf life and is stable over a wide pH range, has concentrations of hydrogen peroxide. Catalase-R is more effective than beef liver catalase for neutralisation of concentrated (eg. 3%) hydrogen peroxide solutions. This catalase may be used in the cleaning and disinfecting of contact lenses.
                                                                                                                                                                                                                                            11.0%; Score 424.8; DB 14; Length 3108; ilarity 54.8%; Pred. No. 9.5e-106; Conservative 0; Mismatches 762; Indels 221;
                            Cleaning and disinfecting contact lenses – using hydrogen peroxide soln, and decomposing residue on lenses with reduced amt. of Aspergillus niger catalase R
                                                                                                                                                                                                                     Sequence 3108 BP; 674 A; 955 C; 708 G; 769 T; 2 other;
                                                                                Disclosure; Fig 5; 22pp; English
                                                                                                                                                                                                                                                          Best Local Similarity
Matches 1193; Conserva
WPI; 1993-303156/38.
P-PSDB; AAR41753.
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                                                                                                                                                                             catR gene; A. niger; catalase-R; hydrogen peroxide; oxygen; water; pH range; shelf life; beef liver catalase; contact lenses; ss.
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/number-Exon 2
/13.715
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910..970
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/codon= seq:TGC aa:Trp
621..682
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/product=_catalase-R
327..620
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/number= Intron 1
683..909
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1387..1440
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                 2271 AGGTCGGCTTCCTGGC 2286
     2649 AAATCGCCCTCCTGAC 2664
                                                                                      AAQ48459 standard; DNA; 3108
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1111 CCCAGGGTC	2349 AGCTCAGCC	1971 AGAC	2409 CGGTCTTCG	2031 rccccccrc	2469 GTGAAACCGI	2091 GCCCCCACGI	2529 G	2151 TCCGTGTCGC	2589 ACAAGCCAAC	2211 CCAACAAGAC	2649 AAATCGCCCT	2271 AGGTCGCTT	JULT 5	AAF13196 ID AAF13196 standard:	AAF13196;	13-MAR-2001 (first	0	Multiple gene expre	expressed sequence Aspergillus oryzae;	culture condition; metabolic pathway em	Aspergillus oryzae.	WO200056762-A2.	28-SEP-2000.	22-MAR-2000; 2000WO-	. 22-MAR-1999; 99US-	(NOVO) NOVO NORDISK	Berka RM, Rey MW,	WPI; 2000-594572/56.	Monitoring different	uses illorescence-la substrate of express	Claim 88; Page 2370;	The present inventio expression of genes expression of the sa	cells. The method us the FF cells and a s are used in the meth
а	ά	<u>ଶ</u>	λō	qa —	οy	q	Qy	ପ୍ର	Oy.	ପ୍ଧ	δò	ପ୍ର	RES	AAF	XX Y	X	X G	K X	KK	K K	X S	X M	X C	PF	X # ;	PA	XX II	×	X	Z E \$	S X	ខខខ	
GAAATTCC 1268 		 ACTGCCTC 1131	CATGTTGAT 1388		TTGGTCAAG 1448	 GTGGTGCGA 1251	CAGGCTCTT 1508		TCTGGAAGG 1568	 AATGGCCAC 1371	GTGTTTCTC 1628	1394	ACTITATAT 1688		CCAAGTITG 1748	 FTCGTTTCG 1483	CACCCAA 1808	ACACTCCTC 1543	AGCAGATCA 1868	ACAGGCTG 1603	GAAGCGTA 1928	CAAAIGCCA 1633	ATTTCACG 1988	ACTICACC 1693	ATCGCCAT 2048			ACAACAAC IBI3				CAACCGGA 2288	AACCGCG 2348
GCTATTCAATTCCCTGATTGACTGTGTGAGCGGGAACCAGAGGGAAATTCCC	ACGCCATGGGATTTCCTCAGCCAGCC	CAGGCCGCTACTGCTTCCGCTTGGGACTTCTTCAGCCAGC	TCAGGACATGGAATCCCTCGCTCAATGCG	.132 CACAGTGCCTTGTGGCTGATGTCTGGTAACGGTATTCCTCGTTCTTCCGCCACATGAAC	CGACTTGTCACCGACGAGGCCAACTCGAC	192 GGCTACGGAGTCCACAGCTTCGCTCGCTGCCAATGGCACTTCCAAGGTGGTGCGA	449 TTTCGCTGGAAGACCCTCCAAGGAAGAGGCGCCTGGTATGGGAAGAGGCACAGGCTCTT	252 ACACTIGGAAGICCCAACAGGGIGITGCCAGICIGGIGIGGGAIGAGGICAGAGCCGCI	PATCGACAAGACCTCTGGGATGCCATTGA	312 GCTGGTAAGAACAGTGACTACCACCGCCAGGATCTGTACAATGCGATGCCCAATGGCCAC	TACCCTGAGTGGGAGGTAAGATATGATTCCCCCCAAATCATTAGTTCTGACAGTGTTTCTC	.A.	GTCTTTTTTATATCTTCAACTAAGACTG		CTTTCAATTGGTGAATGAAGCAGATCAAT	AGCCCAGATCATGGATGAGGCTGACATGC	1749 ATTTCGATCTATTAGATCCCACGAAATCATCCCAGAAGAACTTGTTCCTTTCACCCAA 1806	CAAGTTGGTCCCCGAGGAGGTTGTCCCTT	AAACCCAAAAGTTATTTGCCGAAACTG	CAACCCACCAACTACTTGCTGAAGTTG	TTTGGAATATGAATACATGTATAGCTAGA		1929 TATCTAAATATATTCCACAGTTCCAACCAGGTCATGTAGTTCGCGGAATCGATTTCACG	rccaacccggrcacgrcgrrccrggcarr	GATGACCCTTTGCTTCAGGGCCGCTTGTACTCCTACCTTGACACTCAATTGAATCGCCAT	STCTCTCTCCTACCTCGACACTCAGTTG		AATCGCGACGGTGCTGCTAACTTCTCACCTACCATGTCAACTTCATCATAACAA		ATCGATITGTATAGAGTATTAACATCCCCGTCTGCACAGGACAAATGTTCATCCCTCTAA		29 ACACGGCCGCATATACACCCCAACTCAATGAGCAACGGATTCCCACAACAAGCCAACGGA	CCCATAACAGAGGATTCTTCACCGCCACCTGGGCGTATGGTAAATGGACCACTAGTGCGCG 2348
	9 CAGGCTGCAACTGCACATGAT	2 CAGGCCGCTACTGCACACT	9 CATGCCCTCTTCTGGGCAATG	2 CACAGIGCCIIGIGGCIGAIG	9 GGGTGGGGGGTCCATACCTTC	GGCTACGGAGTCCACAGCTTC	9 TTTCGCTGGAAGACCCTCCAAG	ACACCTTGGAAGTCCCAACAGG	9 GGCGGAAAGAATCCCGACTTCC	CCTGGTAAGAACAGTGACTACC		1372 TACCCGAATACGAGGTCAGCCA	TGCTCTGTCGGTTGCTCTTTTC		ACGITITACICATATAGCIGG	TGCTGACATCCCCTAGGTCCA	ATTTCGATCTATTAGATCCCAC	GCTTCGACCTTCTGGATCCCAC	TCGGAAAATGGTCTTGAACCG	TCGGAATGATGGAGCTCAATGC	TGGTTGGTCCACCCCTATATA	1604 GTGTATGTATTCCCCATTCAT	TATCTAAATATATTTCCACAGT	GACATAATCTAACTTCTGCAGT	GATGACCCTTTGCTTCAGGGCCC	GGAGGTCCCAACTTCGAGCAAG	GGCGGTCCCAACTTCGAGCAAA	AATCGCGACGGTGCTGGTAAGC				ACACGGCCGCATATACACCCAAC 	CCCATAACAGAGGATTCTTCACC
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CCGAGCITCAACGACGICTCCCAACCGCGTCTCTTCTACAACTCACTCA 2408
                                                                                   GAGAAGCAATTCCTCGTCAACGCCATGCGCTTCGAAAACTCCCACGTGCGGA 2468
                                                                                                                                                                STCCGTAAGAACGTCATCATCCAGCTGAACCGCGTCGACAACGACCTCGCCC 2528
                                                                                                                                                                                                                                               3CGTAGCTATCGGCGTCGAACCCCCATCCCGGACCCAACCTTCTACCACA 2588
                                                                                                                                                                                                                                                                                                                            ACCGICCCCAICGGCACCTICGGCACGAATCICCIGGGCTCGACGGGCTGA 2648
                                                                                                                                                                                                                                                                                                                                                                                                            ession; filamentous fungal cell; EST;
a tag; Fusarium venenatum; Aspergillus niger;
b; Trichoderma reese!; identification; recombination;
convironmental stress; spore morphogenesis;
engineering; catabolic pathway engineering; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ntial expression of genes in filamentous fungal cells labeled nucleic acids isolated from the cells and a ssed sequence tags -
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ention describes a method for monitoring differential enes in a first filamentous fungal (FF) cell relative to he same genes in one or more second filamentous fungal od uses fluorescence-labeled nucleic acids isolated from a substrate of expressed sequence tags (EST). The ESTS methods for monitoring differential expression of genes
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Shuster JR, Kauppinen S, Clausen IG, Olsen PB;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  EST SEQ ID NO:5719.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ); 3161pp; English.
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SK AS.
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TCCTGGC 2286
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the direct filamentous fungal (FF) cell relative to expression of the same genes in one or more second filamentous fungal cells. Monitoring the global expression of genes from FF cells allows the production potential of the microorganisms to be improved. New genes may be discovered, possible functions of unknown open reading frames can be discovered, possible functions of unknown open reading frames can be capture copy number variation and stability can be monitored. The expression of genes can be used to study how FF cells anotitored. The expression of genes can be used to study how FF cells anotitored. The expression metabolic or catabolic pathway confined in culture conditions, environmental stress, spore morphogenesis, recombination, metabolic or catabolic pathway confined in culture and organisation of the morphogenesis, recombination of redundancy as one spot on an increarrays based on function of the gene products to facilitate analysis of the results. AAF07478 to AAF11247 represents ESTs from Aspergillus practime, analysis of the results. AAF07478 to AAF11857 from Aspergillus or pages to AAF14873 represents ESTs from Aspergillus presents and specifically claimed in the present invention.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Sequence 1186 BP; 252 A; 350 C; 289 G; 294 T; 1 other;
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1332 TCACGCTGTCAAGCCGCAACCAGACAGTGAAATTCCCCAGGCTGCAACTGCACATGATAC 1291 1112 AGCACAACAAATATGAATACAAACCCAGGACCTAGGCTGACTACTCGGCAATGTAGATAT 1171 1051 531 651 501 502 TITCIACACIGAIGAGGGIAACI---- 524 812 IGIGACCGIGITGCAAAICCGCIAAITICAAITITACGCAGGITCCIGAGCGCCGCCGTCCA 871 322 CGCTCGCGGTGTTGGTGCCCATGGTGTCTTCACCTCGTACGGTGACTCAACATCAC 381 991 302 -----GITCCIGAACGIGCAGICCA 321 872 IGCICGAGGAGCIGGIGCCCAIGGCGIATICACAICCIAIAATAACIGGICGAAIAICAC 931 751 TITATCITCCGCCAGAAGATICAACACITICAICAGAGAGGGTAIGTAGAIACAAAATA 811 260 TICATCTICCGACAGAAGAFCCAGCGCTICGATCACGAACGT------301 932 AGCCGCATCCTTCTTGAACGCGGCAGGAAAGCAGACACCCAGTATTCGTGCGGTTTTCTAC -----TCGATAT 572 AGCGGTCAGAAAGGCCCCCTCGATCGCCGCCATGACACTCTCTCCGACCCTACGGACCAG 632 TITCITAGCAAGITITACATIGACGAIGAACAGICGGIGCIAACAACGGACGIGGIGGI CCCATCGAGGACCAACACAGCCTGAAGGCTGGAAATAGAGGCCCAACTCTACTTGAGGAT Gaps Score 279.4; DB 21; Length 1186; Pred. No. 5.4e-66; 0; Mismatches 262; Indels 148; 7.2%; 604; Conservative Similarity 525 Query Match Best Local S: Matches 604, 692 200 752 õ g 요 ð q ö 요 õ 셤 ò ò 셤 셤 ð g õ ద 셤 ŏ 셤 ò õ ò

	CGGCCATGGTATCCCGCGCTCTTCGCCACGTTGCTTGCGTGGAAGACGCTCCTAAGG ACTTGTCACCGAGGAGGGCAACTCGACGTTGGTCAAGTTTCGCTGGAAGACCCTTCAAGG
1532 TCGA(892 GCGC	TCGACAAGACCTCTGGGATGCCATTGAATCTGGAAGGTACCCTGAGTGGGAGGT 1585
	standard; DNA; 2794 BP.
AAT42791; 02-FER-1997	(first entry)
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atalase; hyd	Catalase; hydrogen peroxide; pasteurisation; bleaching; ss.
cytalidium t	Scytalidium thermophilum.
Key exon	Location/Qualiflers
intron	w ₁ C
exon	/*tag= D 414.617 /*tag=
intron	96
exon	697.717 697.717 /*tag=
intron	718793 /*tag= f 704
4 4 4 5 5 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6	/*tag g 95.5 1108
exon	/*tag= h 1109.1165
intron	/*tag= i i1661218
exon	/*tag= j 1219.1788
intron	/*tag= k /*tag= k /*tag= 1842
exon	/#tag= 1 1843.2670
intron	7 * CEG## III 2611.2764 7***********************************
exon	27
primer_bind	
orimer bind	/ rays p //octe= "forward primer PmeST5" 1285.1304
	/*tag= q /note= "reverse primer St3.2not"

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GIGAAICCATTICIAACCICAAGCCCAGGAIGGCITCGGGGGICCACACGIICCGGIITGI 1250
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2153 CTTCCATCTTGACCCAATCGATTTGTATAGAGTATTAACATCCCCGTCTGCACAGGACAA 2212
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                                                          CCATGGTAAGCAATGGACCAAGGAGCCGCACCTGGGGTGACATGCCAGGGAGTACACAAG
                                                                                      1384 TIGAIGGGIGGGGGGTCCATACCTTCCGACTIGTCACCGACGAGGGCAACTCGACCTIGG
                                                                                                                  1011 GCGTTCCGATGACCCTCGTGTGACCAAGGCAGTACAACACTCCACGGAGGACTCGAAGAG
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                                                                                                                                                                                                                                                                                                          Genomic DNA (T42791) from Scytalidium thermocellum codes for catabase (W06109), an enzyme useful for scavening H202, e.g. in pasteurisation and bleaching. To obtain the gene, PCR primers (see also T42792-93) based on partial peptide sequences of the catabase were used to amplify S. thermophilum genomic DNA. An isolated ENBL4, and a clone conte. the catabase coding region was isolated. The gene can be incorporated into an expression vector and used for the prodn. of catabase in transformed host (esp. Aspergillus) host
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               produce
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               DB 17; Length 2794;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Indels 129;
                                                                                                                                                                                                                       New isolated Scytalidium catalase nucleic acid – used to r
catalase for use in scavenging hydrogen peroxide, used in
pasteurisation or bleaching
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Sequence 2794 BP; 576 A; 785 C; 820 G; 613 T; 0 other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Score 249.2; DB 17;
Pred. No. 1.8e-57;
0; Mismatches 1048;
                                                                                                                                                                                                                                                                                Claim 4; Page 20-23; 47pp; English.
                                                                                                                     NORDISK BIOTECH INC
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                                                             96MO-US06096
                                                                                         95US-0435925
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P-PSDB; AAW06109.
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WO9634962-A1
                                                                                        05-MAY-1995;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      expressed sequence tag; Fusarium venenatum; Aspergillus niger; Aspergillus oryzae; Trichoderma reesel; identification; recombination; culture condition; environmental stress; spore morphogenesis; metabolic pathway engineering; catabolic pathway engineering; ss.
                                                                                                                                                                                                                                                                                                                                                                                            2858 ACGCAATACCCAAGAGGTCGCCCGCTCAGGATTATTACGGATGCATACGCGTATGGAAAG
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                                                                                                                                                                        2573 CCAACCITCTACCACAACAAGGCAACCGICCCCAICGGCACCITCGGCACGAATCTCCTG
                                                                                                                                                                                                                                                                 GAGCAGCTCCGGGCCGCGTTTAACAGCGCCAACAACAAAGTAGATATCGTCCTAGTGGGC
TTCTACAACTCACTCACGGTCTTCGAGAAGCAATTCCTCGTCAACGCCATGCGCTTCGAA
                                                                             ATCAGCCTTGTGAAGTCGGAAGAAGTCAAGAAGAACGTGCTCACCCAGCTCAACCGCGTC
                                                                                                      GACAACGACCTCGCCCGCCGCGTCGCGCTAGCTATCGGCGTCGAACCCCCATCCCCGGAC
                                                                                                                    2633 CGGCTCGACGGGCTGAAAATCGCCCTCCTGACAAGAGACGACGGTAGCTTCACGATCGCG
                                                     AACTCCCACGTGCGGAGTGAAACCGTGCGTAAGAACGTCATCATCCAGCTGAACCGCGTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    gene expression; filamentous fungal cell; EST;
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The present invention describes a method for monitoring differential expression of genes in a first filamentous fungal (FF) cell relative to expression of the same genes in one or more second filamentous fungal cells. The method uses fluorescence-labeled nucleic acids isolated from the Fr cells and a substrate of expressed sequence tags (EST). The ESTS care used in the methods for monitoring differential expression of genes in a first filamentous fungal (FF) cell relative to expression of the same genes in one or more second filamentous fungal cells. Monitoring the global expression of genes from FF cells allows the production of potential of the microorganisms to be improved. New genes may be discovered, possible functions of unknown open reading frames can be contituded and gene copy number variation and stability can be identified and gene copy number variation and stability can be considered. The expression of genes can be used to study how FF cells adapt to changes in culture conditions, environmental stress, spore considered. The expression of genes can be used to study how FF cells adapt to changes in culture conditions, environmental stress, spore confineering. Using ESTS provides several advantages over genomic or random conA closes including elimination of redundancy as one spot on array equals one gene or open reading frame, and organisation of the canalysis of the results. AAF01478 to AAF11247 represents ESTS from Aspergillus orgase; and niger; AAF11854 to AAF14878 represents ESTS from Aspergillus orgase; and AAF14879 to AAF18537 represents ESTS from Aspergillus orgase; and a specifically claimed in the present invention.
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                                 PB;
                                                                                                       Monitoring differential expression of genes in filamentous fungal ce
uses fluorescence-labeled nucleic acids isolated from the cells and
substrate of expressed sequence tags -
                                    Olsen
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                                    Clausen IG,
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Score 240.2; DB 21;
Pred. No. 3.3e-55;
0; Mismatches 243;
                                      Kauppinen S,
                                                                                                                                                                                                 88; Page 2415; 3161pp; English
                                      Shuster JR,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       6.2%;
61.8%;
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Best Local Similarity 61.89
Matches 402; Conservative
(NOVO ) NOVO NORDISK AS
                                                                            WPI; 2000-594572/56.
                                        Rey MW,
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                                        Berka RM,
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(NOVO) NOVO NORDISK BIOTECH INC.

us-09-674-195c-1.rng

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The invention describes a method of monitoring differential expression of genes in a first Bacillus cell relative to expression of the genes in cother Bacillus cells. Comprising hybridising labelled nucleic acid probes isolated from Bacillus cells to a substrate containing array of Bacillus clocated from Bacillus cells to a substrate containing array of Bacillus cells as spot in the array. The method is useful for measuring the expression of a spot in the array. The method is useful for measuring the expression of genes in a first Bacillus cells in the method is useful for monitoring of a spot in one or more second Bacillus cells. The method is useful for monitoring genes, identifying possible functions of unknown open reading frames and controring gene copy number variation and stability. Monitoring changes in expression of genes may be used to provide a representation of the way control of genes may be used to provide a representation of the way control of genes may be used to provide a representation of the way control of genes may be used to provide a representation of the way control of genes may be used to provide a representation of the way control of genes and per physiological provocation. Extensive follow-up characterisation is unnecessary, when one spot on an array cequals one gene or one open reading frame, since sequence information is the method of the invention.
                                                                                                                    2729 AAAGTAGATATCGTCCTAGTGGGCTCATCGCTTGATCCCCAACGCGGGGTGAACATGACC 2788
600 GGCACTITCGGACAGAAGCTGAAGAAGCTCGATGGACTGAAGGTTGGCTTCCTGGCTTCG 659
                                                                                                                                               GACGACGGTAGCTTCACGATCGCGGAGCAGCTCCGGGCCGCGTTTAACAGCGCCAACAAC
                                                                          660 GITGAGACCCCIGCCICCALCGAGGCAGCCICTGAGCTCAGCAAGCAGCTTTCIGAGGAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Monitoring differential expression of several genes in first Bacillus cell relative to expression of same genes in one or more second Bacillus cells, by using substrate containing Bacillus genomic
                                                                                                                                                                                                                            TATTCCGGCGCCGACGCTCGATCTTCGATGCCGTGATCGTCGTCGGCGGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Differential gene expression; genomic sequenced tag; GST; altered culture condition; environmental stress; physiological provocation; ds.
                                                                                                                                                                                                                                                                                                                                                                                                                                                            Bacillus licheniformis genomic sequence tag (GST) #2022.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Claim 4; SEQ ID NO 2022; 200pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    (NOVO ) NOVOZYMES BIOTECH INC (NOVO ) NOVOZYMES AS.
                                                                                                                                                                                                                                                                                                                                       ABK74731 standard; DNA; 2037
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           06-OCT-2000; 2000US-0680598.
27-MAR-2001; 2001US-279526P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         JS-OCT-2001; 2001WO-US31437.
                                                                                                                                                                                                                                                                                                                                                                                                                      13-AUG-2002 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Bacillus licheniformis
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                                                                                                                    1458 AAGACCCTCCAAGGAAGAGGGGGCCTGGTATGGGAAGAGGCACAGGCTCTTGGCGGAAAG 1517
                                                                                                                                                           1518 AATCCCGACTTCCATCGACAAGACCTCTGGGATGCCATTGAATCTGGAAGGTACCCTGAG 1577
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                                                                                                                                              TICCCIGATITGATICACGCIGICAAGCCGCAACCAGACAGIGAAAIICCCCAGGCIGCA
                                                                                                                                                                                              576 ATGTGAGCAATGTCTGACAGGCGATTCCGCGAAGCTACAGGATGATGGAAGGCTTCGGC
                                                                                                                                                                                                                                                              1398 GICCATACCIICGACIIGICACCGACGAGGGCAACICGACCIIGGICAAGIIICGCIGG
                                                                                                                                                                                                                                                                                                                 Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Catalase; hydrogen peroxide; contact lens; disinfecting solution; ds.
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                                                                        Length 2037;
                                                                   4.2%; Score 164; DB 24; Length 2
61.4%; Pred. No. 4.2e-34;
iive 0; Mismatches 165; Indels
                                               Sequence 2037 BP; 561 A; 500 C; 550 G; 426 T; 0 other;
Note: The sequence data for this patent did not form specification, but was obtained in electronic format
                          ftp.wipo.int/pub/published_pct_sequences.
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                                                                            Best Local Similarity 61.4 Matches 263; Conservative
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Catalase kat HP11 gene.
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Escherichia coli.
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                                                                     Duery Match
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8X88888
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27-SEP-2001
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                                                                                                                                                                                                                                                                                                  1520 AGTGCCCACGATACTTCTGGGATTATGTTTCTCTGCAACCTGAAACTCTGCACGTG 1579
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 The present invention describes: (1) a new catalase obtained by cloning the Bacillus thermoglucosidasius; and (11) a process for preparing the catalase with high output, based on a genetic endineering technique that comprises: the catalase gene cloned from the microbe is used to form its expression plasmid and cells are transformed to obtain the expression product. Also described are a plasmid and transformed cells produced by the process, as well as a composition containing the new catalase used to decompose residual hydrogen peroxide in contact lens disinfecting liquids. The present sequence represents a catalase kat HPII gene sequence, which is given in an example from the present invention.
 catalase: The gene, a composite containing it and its preparation 1 - useful for removal of hydrogen peroxide from contact lens
                                                                                                                                                                                                                                                                                                                                                   1398 GTCCATACCTTCCGACTTGTCACCGACGAGGGCAACTCGACCTTGGTCAAGTTTCGCTGG
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                                                                                                                                                                                                                                                                                                                                    TTCCCTGATTTGATTCACGCTGTCAAGCCGCAACCAAGAGTGAAATTCCCCAGGCTGCA
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                                                                                                                                                                                                                                                              Gaps
                                                                                                                                                                                                                                  Score 159.4; DB 20; Length 3466; Pred. No. 1.1e-32;
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                                                                                                                                                                                                                                                              0; Mismatches 166; Indels
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                                                                                                                                                                                                              Sequence 3466 BP; 928 A; 880 C; 816 G; 842 T; 0 other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                E. coli DNA for cellular proliferation protein #169
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                                                     Example 4; Fig 8; 30pp; Chinese.
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                                                                                                                                                                                                                                      4.1%;
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                                                                                                                                                                                                                                                                259; Conservative
                            disinfecting solutions
                                                                                                                                                                                                                                                   Local Similarity
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                                                                                                                                                                                                                                        Query Match
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The invention relates to antisense inhibitors of genes essential to prokaryotic cellular proliferation, their use in identifying the genes, their use in the discovery of novel antibiotics, the essential comparation is also used in the encoded proteins. The prokaryotes used are been their coll, Staphylococcus aureus, Salmonella typhi, Klebsiella typhines and salmonella typhi, Klebsiella proudmonas aeruginosa and Enterococcus faecalis. The pround of an antibiotic development. The antisense nucleic acids can also be used for antibiotic development. The antisense nucleic acids can also be used to identify proteins used in proliferation, to express these proteins. The proteins can be used to screen compounds in rational drug discovery programmes. The antisense nucleic acid sequence is also useful to screen for homologous nucleic acids sequence is also useful to screen a wide variety of organisms. The present sequence encodes an essential prokaryotic cellular proliferation protein.
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                                                                                                                                                                                                                                                                                                     GJ;
                                                                                                                                                                                                                                                                                                     Carr
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   of the printed specification, but was obtained in electronic format directly from WIPO at
                                                                                                                                                                                                                                                                                                   Trawick JD,
                                                                                                                                                                                                                                                                                                                                                                                                                                                 New polynucleotides for the identification and development antibiotics, comprise sequences of antisense nucleic acids
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               4.1%; Score 157.8; DB 23; Length llarity 60.7%; Pred. No. 2.3e-32; Conservative 0; Mismatches 167; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Sequence 2262 BP; 566 A; 610 C; 567 G; 519 T; 0 other;
                                                                                                                                                                                                                                                                                                   Zyskind JW, Wall D,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ftp.wipo.int/pub/published_pct_sequences.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Claim 27; Seq ID No 6084; 511pp; English.
                                                                                            2000US-207727P.
2000US-242578P.
2000US-253625P.
2000US-257931P.
2001US-269308P.
21-MAR-2001; 2001WO-US09180.
                                                                                                                                                                                                                                                                                                        Ohlsen KL,
                                                                                                                                                                                                                                                      (ELIT-) ELITRA PHARM INC
                                                                                                                                                                                                                                                                                                                                  Xu HH;
                                                                                                                                                                                                                                                                                                                                                                               WPI; 2001-611495/70.
P-PSDB; AAU34588.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Best Local Similarity
Matches 258; Conserv
                                                                                                                                                                           22-DEC-2000;
16-FEB-2001;
                                                                                                                                                                                                                                                                                                                             Yamamoto RT,
                                                                                                                                                      27-NOV-2000;
                                                                                                                                                                                                                                                                                                        Haselbeck R,
                                                                            23-MAY-2000;
                                                                                                       26-MAY-2000;
                                                                                                                               23-OCT-2000;
                                                    21-MAR-2000;
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1397

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1278 ACTGCACATGATACGGCATGGGATTTCCTCAGCCAGCAGCCCAGCTCATTGCATGCCTC 1337
                                                                                                                                           AAGACCCTCCAAGGAAGAGCGGCCTGGTATGGGAAGAGGCACAGGCTCTTGGCGGAAG 1517
                                                                                                                                                        1520 AGTGCCCACGATACTTTCTGGGATTATGTTTCTCTGCAACCTGAAACTCTGCACAACGTG
                                                    1398 GTCCATACCTTCCGACTTGTCACCGAGGGCAACTCGACCTTGGTCAAGTTTCGCTGG
                                                                                                                                                                                     1518 AATCCCGACTTCCATCGACAAGACCTCTGGGATGCCATTGAATCTGGAAGGTACCCTGAG
                                                                                                                                                                                                                                                                                                                                                                            DNA encoding novel human diagnostic protein #28517.
                                                                                                                                                                                                                                                                                                            AAS92713 standard; cDNA; 3299 BP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Tang YT;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   30-MAR-2001; 2001WO-US08631.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      31-MAR-2000; 2000US-0540217.
                                                                                                                                                                                                                                                                                                                                                         (first entry)
                                                                                                                                                                                                                                  1578 TGGGA 1582
                                                                                                                                                                                                                                                     1820 TACGA 1824
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P-PSDB; ABG28526.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Drmanac RT, L1u C,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       (HYSE-) HYSEQ INC
                                                                                                                                                                                                                                                                                                                                                                                                                                                        WO200175067-A2.
                                                                                                                                                                                                                                                                                                                                                       13-FEB-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                     Homo saptens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               11-OCT-2001.
                                                                                                                                            1458
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                                                                                                                                                                                                                                                                                       RESULT 12
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                                                                                                                                                                                                                                                                                                                                880 AAACCACTGGCAGGTAAAGCCTCACTCGTTTGGGATGAAGCACAAAAACTCACCGGACGT 939
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          The present invention describes a catalase isolated from Bacillus thermoglucosidasius. A composition containing a B, thermoglucosidasius datalase is used to decompose hydrogen peroxide present in residual disinfectant remaining on a contact lens to avoid undestired injury to users. The catalase enzyme can also be used to treat textile substances from a non-nammalian source and reducing the need to use bovine liver catalases so the risk of cross infection from cows to humans is reduced. The production procedure is simple and has low cost thith high yield of enzyme. The present sequence represents the catalase kat HPII gene from an example from the present invention.
                                                                                                                                                                                                                                                                                                                                                                                                                                                          Isolated catalase gene derived from Bacillus thermoglucosdasius useful for decomposing hydrogen peroxide in residual disinfectant remaining on a contact lens -
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Gaps
                                                                                                                                                                                                                                 Catalase; genetic engineering; hydrogen peroxide decomposition; contact lens; disinfectant; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Query Match
4.0%; Score 156.2; DB 21; Length 3466;
Best Local Similarity 60.5%; Pred. No. 8.2e-32;
Matches 257; Conservative 0; Mismatches 168; Indels 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Sequence 3466 BP; 920 A; 890 C; 815 G; 841 T; 0 other;
                                                                                                                                                                                                           Catalase kat HPII gene sequence SEQ ID NO:10.
                                                                                                                                            AAZ88404 standard; cDNA; 3466 BP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Example 4; Fig 8; 30pp; English.
                                                                                                                                                                                                                                                                                                                                                                                         (BIOT-) DEV CENT BIOTECHNOLOGY.
                                                                                                                                                                                                                                                                                                                                                                     97CN-0120386.
                                                                                                                                                                                                                                                                                                                                      98US-0027166
                                                                                                                                                                                                                                                                                                                                                           97TW-0100018
                                                                                                                                                                                        (first entry)
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                                                                1578 TGGGA 1582
                                                                                      1000 TACGA 1004
                                                                                                                                                                                                                                                                                                                                                                                                                                   WPI; 2000-160378/14.
                                                                                                                                                                                                                                                                  Escherichia coli
                                                                                                                                                                                       05-MAY-2000
                                                                                                                                                                                                                                                                                                                                  20-FEB-1998;
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                                                                                                                                                                                                                                                                                                             08-FEB-2000
                                                                                                                                                                  AAZ88404;
                                                                                                                                                                                                                                                                                                                                                                                                              Hwong C,
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                                                                                                                       RESULT 11
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The invention relates to isolated polynucleotide (I) and polypeptide (II) sequences. (I) is useful as hybridisation probes, polymerses chain reaction (PCR) primers, oligomers, and for chromosome and gene mapping, and in recombinant production of (II). The for identifying expressed and in adaptostics as expressed sequence tags to identifying expressed genes. (I) is useful in gene therapy techniques to restore normal activity of (II) or to treat disease states involving (II). (II) is useful for generating antibodies against it, detecting or quantitating a polypeptide in tissue, as molecular weight markers and as a food supplement. (II) and its binding partners are useful in medical
Human; chromosome mapping; gene mapping; gene therapy; forensic; food supplement; medical imaging; diagnostic; genetic disorder; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          New isolated polynucleotide and encoded polypeptides, useful in diagnostics, forensics, gene mapping, identification of mutations responsible for genetic disorders or other traits and to assess blodiversity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Claim 1; SEQ ID No 28517; 103pp; English.
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TICCCIGATITGAITCACGCIGTGAGCCGCAACCAGACAGIGAAATICCCCAGGCIGCA 1277

1460

1218

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(BIOT-) DEV CENT BIOTECHNOLOGY
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   1518 AATCCCGACTTCCATCGACAAGACCTCTGGGATGCCATTGAATCTGGAAGGTACCCTGAG 1577
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  972 GACCCGGACTTCCCCCCCCGCGAGTTGTAGCAGCGGATTTCCGGAA 1031
                                                                                                                                                                                                                                                      1277
                                                                                                                                                                                                                                                                                                   ACTGCACATGATACGGCATGGGATTTCCTCAGCCAGCAGCCCAGCTCATTGCATGCCTC 1337
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                                                                                                                                                                                                                                                                                                                          791
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disorders involving aberrant protein expression or biological activity. The polypeptide and polynucleotide sequences have applications in diagnostics, forensics, gene mapping, identification of mutations responsible for genetic disorders or other traits to assess biodiversity and to produce other types of data and products dependent on DNA and amino acid sequences. AAS64197-AAS94564 represent novel human diagnostic coding sequences of the invention.

Once: The sequence data for this patent did not appear in the printed specification, but was obtained in electronic format directly from WIPO at ftp.wipo.int/pub/published_pct_sequences.
                                                                                                                                                                                                                                                                                                                                                                                                                   852 ATTCACACCTTCCGCCTGATTAATGCCGAAGGGAAGGCAACGTTTGTACGTTTCCACTGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                               912 AAACCACTGGCAGGTAAAGCCTCACTCGTTTGGGATGAAGCGCAAAAACTCTCCGGACGT
                                                                                                                                                                                                                                                      1218 TICCCIGATITGATICACGCIGICAAGCCGCAACCAGACAGTGAAATICCCCAGGCIGCA
                                                                                                                                                                                                                                                                                                                  GTCCATACCTTCCGACTTGTCACCGACGAGGCAACTCGACCTTGGTCAAGTTTCGCTGG
                                                                                                                                                                                                                                 GGTATTITTGACCTCGTTGGCAATAACACGCCAATCTTCTTTATCCAGGATGCGCATAAA
                                                                                                                                                                                                                                                                     ATGTGGGCGATGTCGGATCGCGGCATCCCCCGCAGTTACCGCACCATGGAAGGATTCGGT
                                                                                                                                                                                      Gaps
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                                                                                                                                                               DB 23; Length 3299;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Catalase; PCR; primer; amplification; expression; E.col1; ss; decomposition; hydrogen peroxide; disinfectant; contact lens.
                                                                                                                                                              Query Match
4.0%; Score 154.6; DB 23; Length
Best Local Similarity 60.2%; Pred. No. 2.2e-31;
Matches 256; Conservative 0; Mismatches 169; Indels
                                                                                                                                        Sequence 3299 BP; 850 A; 858 C; 814 G; 777 T; 0 other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   BP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   AAZ28799 standard; DNA; 3466
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   98JP-0055299
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        E.coli catalase HPII gene.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1032 TCCGA 1036
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ACTGCACATGATACGGCATGGGATTTCCTCAGCCAGCAGCCCAGCTCATTGCATGCCTC 1337
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           This sequence corresponds to the catalase HPII gene from E.coli. The gene was PCR amplified by primers AA228797-228798 and the amplified gene was inserted into the plasmid pET-20b for expression in an organism such as E.coli DH5alpha. The E.coli enzyme can be used as a control in sasays for the novel Beachlus thermoglucosidasius catalase (AA228794) of the invention. The catalase protein can be used for the decomposition of hydrogen peroxide contained in the residual disinfectant remaining in a contact lens solution.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                GTCCATACCTTCCGACTTGTCACCGACGAGGCCAACTCGACCTTGGTCAAGTTTCGCTGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1640 ATTCACACCTTCCGCCTGATTAATGCCGAAGGGAAGGCAACGTTTGTACGTTTCCACTGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1518 AATCCCGACTICCAICGACAAGACCICIGGGAIGCCAITGAAICIGGAAGGIACCCIGAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1700 AAACCACTGGCAGGTAAAGCCTCACCGGTTGGGATGAAGCACAAAAACTCACCGGACGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1400 GGTATTTTTGACCTCGTTGGCAATAACACGCCAATCTTCTTTATCCAGGATGCGCATAAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1218 TICCCIGATITGAITCACGCIGICAAGCCGCAACCAGACAGIGAAAITCCCCAGGCIGCA

    useful for production of catalase in high

                                                                                                                                                                                                                                                                                                                                                                                                                                            Length 3466;
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                                                                                                                                                                                                                                                                                                                                                                                                                                               Score 154.6; DB 20; Length
Pred. No. 2.2e-31;
0; Mismatches 169; Indels
                                                                                                                                                                                                                                                                                                                                                                                          Sequence 3466 BP; 924 A; 899 C; 816 G; 827 T; 0 other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Antisense; ds; prokaryotic cellular proliferation antibiotic; antibacterial; drug design.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       AAS56250 standard; DNA; 2253 BP
                                                                                                                       Example 4; Fig 8; 20pp; Japanese
                                                                                                                                                                                                                                                                                                                                                                                                                                               4.0%;
illarity 60.2%;
Conservative 0
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                                               Preparation of catalase
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1578 TGGGA 1582
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WPI; 1999-603710/52
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Best Local Similarity
Matches 256; Conserv
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AAS51464 standard; DNA; 2130 BP.
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23-MAY-2000; 2000US-206848P.
26-MAY-2000; 2000US-24257P.
23-OCT-2000; 2000US-242578P.
27-NOV-2000; 2000US-255625P.
22-DEC-2000; 2000US-25931P.
16-FEB-2001; 2001US-269308P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            21-MAR-2001; 2001WO-US09180
                                                                                                                                                                                                                                                                                                                                                    (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Ohlsen KL,
Xu HH;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 (ELIT-) ELITRA PHARM INC
                                                                                                                                                         1578 TGGGAGGT 1585
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Pseudomonas aeruginosa
                                                                                                                                                                                            991 TACGAGCT 998
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Yamamoto RT,
                                                                                                                                                                                                                                                                                                                                                  13-FEB-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           27-SEP-2001.
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                                                                                                                                                                                                                                              RESULT 15
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                  The invention relates to antisense inhibitors of genes essential to prokaryotic cellular proliferation, their use in identifying the genes, their use in the discovery of movel antibiotics, the essential genes themselves and the discovery of movel antibiotics, the essential consideration is also useful for the identification of potential argets invention is also useful for the identification of potential new targets for antibiotic development. The antisense nucleic acids can also be used to invention is also useful for the identification of potential new targets of or antibiotic development. The antisense nucleic acids can also be used to screen compounds in rational drug discovery and to obtain antibodies capable of binding to the expressed proteins. The proteins used in proliferation in actional drug discovery for homologous nucleic acids which are required for cell proliferation in cessential prokaryotic cellular proliferation protein.

Compared to a sequence data for this patent did not form part contraction in the printed specification, but was obtained in electronic form the contraction of the printed specification, and to contract the secure of form the printed specification and the contraction in the contraction of the printed specification, but was obtained in electronic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1218 ITCCCTGATTTGATTCACGCTGTCAAGCCGCAACCAGACAGTGAAATTCCCCAGGCTGCA 1277
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0.0%; Pred. No. 2e-31;
ve 0; Mismatches 171; Indels 0;
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                                                                                                                                                                                                                                                                                    Zyskind JW, Wall D, Trawick JD,
                                                                                                                                                                                                                                                                                                                                                                                   New polynucleotides for the identification and development antiblotics, comprise sequences of antisense nucleic acids
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                                                                                                                                                                                                                                                                                                                                                                                                                                     Claim 27; Seq ID No 9887; 511pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ftp.wipo.int/pub/published_pct_sequences.
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2000US-242578P
2000US-253625P
                                                                     21-MAR-2001; 2001WO-US09180
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16-FEB-2001; 2001US-269308P.
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Xu HH;
                                                                                                                                                                                                                                              (ELIT-) ELITRA PHARM INC
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P-PSDB; AAU38391.
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 WO200170955-A2
                                                                                                                                         26-MAY-2000;
23-OCT-2000;
27-NOV-2000;
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Yamamoto RT,
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23-MAY-2000;
                                  27-SEP-2001.
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The invention relates to antisense inhibitors of genes essential to prokaryotic cellular proliferation, their use in identifying the genes, their use in the discovery of novel antibiotics, the essential genes themselves and the discovery of novel antibiotics, the essential genes themselves and the encoded proteins. The prokaryotes used are Escherichia coli, Staphylococcus aureus, Salmonella typhi, Klebsiella of pneumoniae, Pseudomonasa aeruginosa and Enterococcus faecalis. The contential is also useful for the identification of potential new targets for antibiotic development. The antisense nucleic acids can also be used to deminify proteins used in proliferation, to express these proteins. The proteins can be used to screen compounds in rational drug discovery for homologous nucleic acids which are required for cell proliferation in a wide variety of organisms. The present sequence encodes an essential prokaryotic cellular proliferation protein.

Colf the printed specification, but was obtained in electronic
1458 AAGACCCTCCAAGGAAGAGGGGCCTGGTATGGGAAGAGGCACAGGCTCTTGGCGGAAAG 1517
                                                                                1518 AATCCCGACTTCCATCGACAAGACCTCTGGGATGCCAFTGAATCTGGAAGGTACCCTGAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Zyskind JW, Wall D, Trawick JD, Carr GJ;
                                                                                                                                                                                                                                                                                                                                         Pseudomonas aeruginosa DNA for cellular proliferation protein #49.
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                                     DB 23; Length 2130;
                                  Query Match 3.9%; Score 151.2; DB 23; Length Best Local Similarity 59.6%; Pred. No. 1.4e-30; Matches 255; Conservative 0; Mismatches 173; Indels
                 Sequence 2130 BP; 401 A; 746 C; 666 G; 317 T; 0 other;
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Sequence 1, Appli
Sequence 27243, A
Sequence 27243, A
Sequence 29, Appl
Sequence 347, Appl
Sequence 347, Appl
Sequence 347, Appl
Sequence 14972, A
Sequence 47146, A
Sequence 47146, A
Sequence 19563, A
Sequence 25910, A
Sequence 23604, A
Sequence 31755, Ap
Sequence 31755, A
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2. /cgn2_6/ptodata/2/pna/VS06_NEW_COMB.seq:*
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6: /cgn2_6/ptodata/2/pna/VS09_NEW_COMB.seq:*
7: /cgn2_6/ptodata/2/pna/VS09_NEW_COMB.seq:*
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Copyright (c) 1993 - 2003 Compugen Ltd.
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6 7 US-09-673-784A-1633

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Sequence 1, Application US/09674195C

Sequence 1, Application US/09674195C

GENERAL INFORMATION:
APPLICANT: Timothy J. Lott
APPLICANT: Timothy J. Lott
APPLICANT: Leonard W. Mayer
APPLICANT: Leonard W. Mayer
APPLICANT: Econard W. Mayer
APPLICANT: Econard W. Mayer
APPLICANT: George S. Deepe
TITLE OF INVENTION: WICLEIC ACIDS OF THE M ANTIGEN GENE OF
TITLE OF INVENTION: METHODS AND KITS FOR DETECTING HISTOPLASMOSIS
TITLE OF INVENTION: METHODS AND KITS FOR DETECTING HISTOPLASMOSIS
TITLE OF INVENTION: WIGHER: US/09/674,195C
CURRENT APPLICATION NUMBER: POT/059/09151
PRIOR PILING DATE: 1999-04-27
PRIOR PILING DATE: 1999-04-27
PRIOR FILING DATE: 1998-04-30
NUMBER OF SEC ID NOS: 20
SOFTWARE: FBACKERO for Windows Version 4.0
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LENGTH: 3862
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US-10-282-122A-36732

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Best Local Similarity 100.0%; Pred. No. 0;
Matches 3862; Conservative 0; Mismatches
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Thu Jun 12

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APPLICANT: Timothy J. Lott
APPLICANT: Timothy J. Lott
APPLICANT: Timothy J. Lott
APPLICANT: Leonard W. Mayer
APPLICANT: Leonard W. Mayer
APPLICANT: Leonard W. Mayer
APPLICANT: George S. Deepe
TITLE OF INVENTION: WILLEIC ACIDS OF THE M ANTIGEN GENE OF
TITLE OF INVENTION: METHODS AND KITS FOR DETECTING HISTOPLASMOSIS
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TITLE OF INVENTION: METHODS AND KITS FOR DETECTING HISTOPLASMOSIS
CURRENT APPLICATION NUMBER: US/09/674,195B
CURRENT FILING DATE: 2000-10-26
PRIOR FILING DATE: 1999-04-27
PRIOR FILING DATE: 1998-04-27
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LOCATION: 3258
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ORGANISM: Histoplasma
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Db 3361 TCTCACATTCAATCTATATTGATCCTTGCACCCAATAAATA	RESULT 3 1959-19590 1950-19590 1950-19590 1950-19590 1950-19590 1950-19590 1950-19590 1950-19590 1950-19590 1950-19500 1950-19500 1950-19500 1950-19500 1950-19500 1950-19500 1950-19500 1950-19500 1950-19500 1950-19500 1950-19500 1950-19500 1950-19500 1950-19500 1950-19500 195000 195000000000000000000000000
111	281 CCTGARCGCCGCCGCCCCTGCTCGCCGCCCCCAACGCCAACGCCAACGCCCCCCCC

09 1875 GTCCACCCCTATATATTGGAATACATGTATAGCTAGATGAAGCGTATATCTA 1934 1201 GCTTCCTCCTCCCCCTTC	RESULT 4 US-10-369-493-27243 Sequence 27243, Application US/10369493 Seducnce 27243, Application US/10369493 SERIERAL INFORMATION: APPLICANT: Cao, Yongwel APPLICANT: Goldman, Barry S. APPLICANT: Goldman, Barry S. APPLICANT: Coldman, Barry S. APPLICANT: Coldman, Barry S. TITLE OF INVENTION: EPARSSION OF MICROBIAL PROTEINS IN PLANTS FOR PRODUCTION OF TITLE OF INVENTION: EPARSSION OF MICROBIAL PROPERTIES TITLE OF INVENTION MICROBIAL PROPERTIES TITLE MICROBIAL PROPERTIES TITLE MICROBIAL PROPERTIES TITLE O
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Db 1097 TGAI	1157	Qy 1882 CCCI Db 1203	Qy 1942 TTCC	1203	OY 2002 TTC:	2062	Db 1318 TTG	Qy 2122 CTG	2182	Db 1377	Qy 2242 TAC	1415	OY 2302 AIT Db 1475 CTT	Qy 2362 CTT	1535	2422	Db 1595 GCP	1655	Oy 2542 AG	Db 1715 TGC	Qy 2602 CCC	Db 1775 CGC	Ü	2719	Db 1895 GG	Qy 2779 GA	Db 1955 CT	Qy 2839 CC
689 GGTCCCATCGAGGACCAACACACGTGAAGGCTGGAAATAGAGGCCCAACTCTACTTGAG 748 	749 GATTTTATCTTCCGCCAGAAGATTCAACACTTTGATCATGAGAGGGTATGTAGAAA 808 			862 GCGCCGTCCATGCTCGAGGAGCTGGTGCCCATGGCGTATTCACATCTATAATAACTGGT 921			982 GGTTTTCTACAGTCGCTGGTAGCAGGCAGTGTTGACTCTGCTCGCGATATCCACGGAT 1041	11		TACTCATAACAGCACAACAATATGAATACAAACCCAGGACCTAGGCTGACTAC		ACTITICATION OF THE CONTROL OF THE C	CIGATITGAITCACGCIGICAAGCCGCAACCAGAGAGAATICCCCAGGCTGCAACTG		1282 CACATGATACGGCATGGGATTTCCTCAGCCAGCACCCAGCTCATTGCATGCCTCTTTT 1341 1	GGGCAATGTAGGAATGGAATCCTCGCTCAATGCGTCATGTTGATGGGTGGG		1402 ATACCTICCGACITGICACCGACGAGGCAACTCGACCTIGGICAAGTITGCIGGAAGA 1461	859 ATACCITCCGICTGACGGACGGCAGGCCAAGICCAAGCTCGTCAAGTGGCATTGGAAGA 918	1462 CCCTCCAAGGAAGAGGGGCCTGGTATGGGAAGAGGCACAGGCTCTTGGCGGAAAGAAT 1521	CGAAACAGGGAAAGGCCGCTCTCGTCTGGGAGGAGGCTCAAGTCCTCGGGAAGCGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGAGAGAGAGAG	1512 CGACTICCACCGTCAGGACCTCTGGGGACGCTATCGAGTCCGGGAACGCCCCTTCATGGG 1038	1582 AGGIAAGAIATGAITCCCCCAAATCAITAGITCTGACAGIGITICTCTGCTCTG	1039 1038	1642 GCTCTTTTCGTCTTTTCTATATCTTCAACTAAGACTGACT		1702 ATAGCTGGGCTTTCAATTGGTGAATGAAGCAGATCAATCCAAGTTTGATTTCAATCTATT 1/61	
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APPLICANT: Novozymes Blotech, Inc.
APPLICANT: Novozymes Blotech, Inc.
APPLICANT: Connelly, Mariah
APPLICANT: Brody, MowIde
TITLE OF INVENTION: Methods For Producing Biological Substances In Enzyme-Deficien
FILE REFERENCE: 10345.000-US
CURRENT APPLICATION NUMBER: US/60/459,902
CURRENT FILING DATE: 2003-03-31
NUMBER OF SEQ ID NOS: 30
SOFFWARE: Patentin version 3.2
SEQ ID NO 29
LENGTH: 2794
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Best Local Similarity 48.0%; Pred. No. 2.1e-54;
Matches 1087; Conservative 0; Mismatches 1048; Indels 129; Gaps
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                                                                                                                                     Sequence 1693, Application US/09675784A
GENERAL INFORMATION:
APPLICANT: HARE, ROBERTA S.
APPLICANT: SHAW, KAREN J.
APPLICANT: SHIMER JR., GEORGE H.
APPLICANT: SHIMER JR., GEORGE H.
APPLICANT: SESLER, MARCO
APPLICANT: APPLICANT: AND USES THEREOR
APPLICANT: APPLICANT: AND USES THEREOR
FILE OF INVENTION: AND USES THEREOR
FILE REFERENCE: 2976-4020US1
CURRENT APPLICATION NUMBER: 05/95/57,784A
CURRENT FILING DATE: 2000-09-29
REIOR FILING DATE: 1999-09-29
NUMBER OF SEQ ID NOS: 13925
SEQ ID NO 1653
2015 CTICAGGGGAAGGGGGCCCATGAGCCCTCTTTCCCTGCTGGCCGTCCTAGCCAGATTCT 2074
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            131 ATATGACCGGCGAGCTCAACCGTCGTGATGATATCCGATGGCGACGCTGCCGCAGCCA 190
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6.7%; Score 259.8; DB 7; Length 1146;
Best Local Similarity 58.3%; Pred. No. 2.2e-57;
Matches 594; Conservative 0; Mismatches 277; Indels 148;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                    ORGANISM: Aspergillus fumigatus US-09-675-784A-1693
                                                                                                                        US-09-675-784A-1693
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1973 CGGAATCGATTTCACGGATGACCCTTTGCTTCAGGGCCGCTTGTACCTCACCTTGACAC 2032	651 GTNEAGGRITIAGGRITIAGGRITIAGGRITIAGGRITIAGGRITIGATGAAGTACACTGATGAAGG 710 1117
RESULT 7 US-10-156-761-347 Sequence 347, Application US/10156761 GENERAL INFORMATION: APPLICANT: INFORMATION: APPLICANT: ISHIKAWA, JUN APPLICANT: ISHIKAWA, JUN APPLICANT: SHIBA, TADAYOSHI APPLICANT: SHIBA, TADAYOSHI APPLICANT: SHIBA, TADAYOSHI APPLICANT: SAKAKI, YOSHIYUKI	Db 1725 GCCGAPTCACAATAATCGCGACGGCCGAGATGTTACACCAAGGAACAAGTA 1784 2153 CTTCCATCTTGACCCAATCGATTTGTATAGAGTATTACAATCCCCGTCTGCAAGGACAA 2212 Db 1785 TCCTGTAAGTGCTCTTTTCCCTCGATCGTCTGGTCGCGCGCTTGCAAGACAA 2212 Qy 2213 ANGTTCATCCCTCTAAACAGGCGGATTGCCCAACACGCTTGGTCACCAGGTCTGCAACAGGTCTGTAACAGGCCCATCAACAGGCAACACGCAACACGCAACACGCAACCCAACACGCAACCCAACACGCAACACCCAACACGCAACACGCAACACGCAACACGCAACACGCAACACGCAACACGCAACACGCAACACCCAACACGCAACACCAACACGCAACACGCAACACGCAACACGCAACACGCAACACGCAACACGCAACACGCAACACGCAACACGCAACACGCAACACGCAACACGCAACACGCAACACGCAACACGCAACACGCAACACGCAACACGCCAACACGCCAACACGCAACACGCCAACACGCCAACACGCCAACACCCAACACGCCAACACCCAACACGCCAACACCCAACACGCCAACACCCAACACGCCAACACCCAACACCCAACACCCAACACCCAACACCCAACAC

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Sequence 1, Application US/10156761
GENERAL INFORMATION:
APPLICANT: OMURA, SATOSHI
APPLICANT: ISEDA, HARDO
APPLICANT: ISHIKAWA, JUN
APPLICANT: SHIBA, TADAYOSHI
APPLICANT: SHIBA, TADAYOSHI
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US-10-156-761-1
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TITLE OF INVENTION: NOVEL POLYNUCLEOTIDES
FILE REFERENCE: 249-262
CURRENT APPLICATION NUMBER: US/10/156,761
CURRENT FILING DATE: 2002-05-29
PRIOR APPLICATION NUMBER: JP 2001-204089
PRIOR FILING DATE: 2001-05-30
PRIOR FILING DATE: 2001-05-30
PRIOR PHILIAMION NUMBER: JP 2001-272697
PRIOR TILING DATE: 2001-08-02
PRIOR TILING DATE: 2001-08-02
NUMBER OF SEQ ID NOS: 15109
SEQ ID NO 347
LENGTH: 2274
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; LOCATION: (1)..(2274)
US-10-156-761-347
                                                                   APPLICANT: SHIBA, TADAYOSHI
APPLICANT: SAKAKI, YOSHIYUKI
APPLICANT: HATTORI, MASAHIRA
TITLE OF INVENTION: NOVEL POLYNUCLEOTIDES
FILE REFERENCE: 249-262
CURRENT APPLICATION NUMBER: US/10/156,761
CURRENT FILING DATE: 2002-05-29
PRIOR APPLICATION NUMBER: JP 2001-204089
PRIOR FILING DATE: 2001-05-30
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Best Local Similarity 63.8%;
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TYPE: DNA
ORGANISM: Streptomyces avermitilis
FEATURE:
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Pred. No. 3.3e-36;
0; Mismatches 155
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US-10-282-122A-31325; Sequence 31325, Appl; GENERAL INFORMATION

Application US/10282122A

TITLE OF INVENTION: Identification of Essential Genes FILE REFERENCE: ELITRA.034A CURRENT APPLICATION NUMBER: US/10/282,122A CURRENT FILING DATE: 2003-02-20 PRIOR APPLICATION NUMBER: 60/191,078 PRIOR FILING DATE: 2000-03-21

'n

Microorganisms

PRIOR

APPLICATION NUMBER:

60/206,848

APPLICANT:

Carr, Grant

Forsyth, R. Yamamoto, Trawick, John

Robert

APPLICANT: APPLICANT: APPLICANT:

Ohlsen, Kari Zyskind, Judith Wall, Daniel

Zamudio, cur Zamudio, cur Zamudio, cur Rob

Carlos

Haselbeck, Robert

APPLICANT: APPLICANT: APPLICANT: APPLICANT: APPLICANT: Wang,

APPLICANT:

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; LOCATION: (4187715)
; OTHER INFORMATION: a, t,
US-10-156-761-1
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SEQ ID NO 1
LENGTH: 9025608
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Matches 273;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ORGANISM: Streptomyces avermitilis FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TYPE: DNA
407599 TGGGAGCT 407606
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                               1578 TGGGAGGT 1585
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                                                    GACCCGGACTTCCACCGCCGGGACCTCGCCGACGCCATCGAGGCCGGCGCCCACCCGCAG
                                                                                                               AAGCCCAAATTGGGCGTGCACTCCCTGGTGTGGGAAGAGGCGCAGATCACCAACGGCGTC 407538
                                                                                                                                            AAGACCCTCCAAGGAAGAGCGGGCCTGGTATGGGAAGAGGCACAGGCTCTTGGCGGAAAG
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                                                                                                                                                                                                                                                                                                                                                              TTCCCGGACGTCATCCACGCGGCAAGCCGCACCCGGGACATCCCCGCAGGCGCAG 407298
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63.8%;
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Pred. No. 1.8e-34;
0; Mismatches 155
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US-10-369-493-42972
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US-10-282-122A-31325
                                                                                           GENERAL INFORMATION:
                                                                                                            Sequence 42972, Application US/10369493
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APPLICANT:
APPLICANT:
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APPLICANT:
TITLE OF IN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Remaining Prior Application data removed - NUMBER OF SEQ ID NOS: 78614
SOFTWARE: Patentin version 3.1
                                                                              APPLICANT: Cao,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Local Similarity
nes 271; Conserv
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FILING DATE: 2000-10-23
APPLICATION NUMBER: 60/253,625
FILING DATE: 2000-11-27
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            FILING DATE: 2000-05-26
APPLICATION NUMBER: 60/230,335
FILING DATE: 2000-09-06
APPLICATION NUMBER: 60/230,347
FILING DATE: 2000-09-09
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               APPLICATION NUMBER: 60/257,931
FILING DATE: 2000-12-22
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   INVENTION:
             Hinkle, Gregory J.
Slater, Steven C.
Goldman, Barry S.
Chen, Xianfeng
                                                                                                                                                                                                                         TGGGA 1582
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                                                                          Yongwei
EXPRESSION OF MICROBIAL PROTEINS
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IN PLANTS FOR PRODUCTION
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SEQ ID NO 42972
LENCTH: 2071
TYPE: DNA
ORGANISM: Myxococcus xanthus
US-10-369-493-42972
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US-10-369-493-47146
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; ORGANISM: Deinococcus radiodurans US-10-369-493-47146
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                                                                                                                                                                                                                                                                                   GENERAL INFORMATION:
APPLICANT: Cao, Yon
APPLICANT: Hinkle,
                                   NUMBER OF SEQ ID NOS: 47374
SEQ ID NO 47146
LENGTH: 2319
TYPE: DNA
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Query Match
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PRIOR FILING DATE: 2002-02-21
NUMBER OF SEQ ID NOS: 47374
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CURRENT FILING DATE: 2003-02-28
                                                                                                      CURRENT APPLICATION NUMBER: US/10/369,493
CURRENT FILING DATE: 2003-02-28
PRIOR APPLICATION NUMBER: US 60/360,039
PRIOR FILING DATE: 2002-02-21
                                                                                                                                                                              TITLE OF INVENTION: EXPRESSION OF MICROBIAL PROTEINS IN TITLE OF INVENTION: PLANTS WITH IMPROVED PROPERTIES FILE REFERENCE: 38-10(52052)B
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                                                                                                                                                                                                                                Hinkle, Gregory J.
Slater, Steven C.
Goldman, Barry S.
Chen, Xianfeng
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RESULT 12
US-10-282-122A-19563
; Sequence 19563, Application US/10282122A
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APPLICANT: Zamud1
APPLICANT: Malone
APPLICANT: Haselb
APPLICANT: Ohlsen
APPLICANT: Zyskin
APPLICANT: Wall,
APPLICANT: Wall,
APPLICANT: Trawic
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Best Local
                                                                                                                                                              TITLE OF INVENTION: Identification of Essential Genes FILE REFERENCE: ELITRA.034A CURRENT APPLICATION NUMBER: US/10/282,122A CURRENT FILING DATE: 2003-02-20 PRIOR APPLICATION NUMBER: 60/191,078 PRIOR FILING DATE: 2000-03-21 PRIOR FILING DATE: 2000-03-21 PRIOR APPLICATION NUMBER: 60/206,848 PRIOR APPLICATION NUMBER: 60/207,727 PRIOR FILING DATE: 2000-05-23 PRIOR APPLICATION NUMBER: 60/207,727 PRIOR FILING DATE: 2000-05-26 PRIOR FILING DATE: 2000-05-26
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                                                                                                 PRIOR APPLICATION NUMBER: 60/
PRIOR FILING DATE: 2000-09-09
                                                                                                                                 PRIOR APPLICATION NUMBER: 60/230,335 PRIOR FILING DATE: 2000-09-06
                                                                                                                                                                                                                                                                                                                               APPLICANT:
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                  APPLICATION NUMBER: 60/253,625
FILING DATE: 2000-11-27
APPLICATION NUMBER: 60/257,931
                                                                 APPLICATION NUMBER: 60/242,578 FILING DATE: 2000-10-23
      APPLICATION NUMBER: FILING DATE: 2000-1:
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Zamudio, car
Zame, Cheryl
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                                                                                                                                                                                                                                                                                                                                                        Carr, Grant
Yamamoto, Robert
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Wall, Daniel
                                                                                                                                                                                                                                                                                                                                                                                                                                           Ohlsen, Kari
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; TYPE: DNA
; ORGANISM: Enterobacter cloacae
US-10-282-122A-19563
                                                                                                                                                                                                                                                                                                                                       RESULT 13
US-10-282-122A-25910
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GENERAL II
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NUMBER OF SEQ ID NOS: 78614
SOFTWARE: PatentIn version 3.1
SEQ ID NO 19563
LENGTH: 2247
      APPLICANT: FOISYTH, R.
APPLICANT: Xu, H.
TITLE OF INVENTION: Identification of Essential
FILE REFERENCE: ELITRA.034A
CURRENT APPLICATION NUMBER: US/10/282,122A
CURRENT APPLICATION NUMBER: 60/191,078
PRIOR APPLICATION NUMBER: 60/191,078
PRIOR FILING DATE: 2000-03-21
PRIOR FILING DATE: 2000-03-21
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APPLICANT: Zamuc
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PRIOR FILING DATE: 2001-02-09
PRIOR APPLICATION NUMBER: 60/269,308
PRIOR FILING DATE: 2001-02-16
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APPLICATION NUMBER:
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                                                                                                                                                         Carr, Grant
                                                                                                                                                                         Trawick, John
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Malone, Cheryl
                                                                                                                                           Yamamoto, Robert
                                                                                                                                                                                                        Zyskind, Judith
                                                                                                                                                                                                                                         Haselbeck, Robert
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iio, Carlos
                                                                                                                                                                                       Daniel
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Pred. No. 1.6e-34;
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807

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RESULT 14

US-10-417-886-3735

Sequence 3735, Application US/10417886

GENERAL INFORMATION:

APPLICANT: Reith G. Weinstock et al.

TITLE OF INVENTION: CLOACAE FOR DIAGNOSTICS AND THERAPEUTICS

FILE REFERENCE: 107196.135

CURRENT APPLICATION NUMBER: US/10/417,886

CURRENT FILING DATE: 2003-04-17
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; ORGANISM: Mycobacterium avium
US-10-282-122A-25910
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             PRIOR FILING DATE: 2000-12-23
PRIOR FILING DATE: 2000-09-09
PRIOR FILING DATE: 2000-09-09
PRIOR PRIOR PRIOR OF THE CONTROL OF 
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Best Local ;
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APPLICATION NUMBER: 60/7
FILING DATE: 2000-05-26
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170; Conservative
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Pred. No. 2.5e-34;
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; ORGANISM: Rhodopseudomonas palustris
US-10-369-493-44226
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PRIOR FILING DATE: 1999-02-18
PRIOR APPLICATION NUMBER: US 60/094,145
PRIOR FILING DATE: 1998-07-14
PRIOR ETLING DATE: 1998-07-18
PRIOR ETLING DATE: 1998-02-18
VUMBER OF SEQ ID NOS: 11326
LENGTH: 2283
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Best Local
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270; Conserv
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ilarity 62.4%;
Conservative
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Pred. No. 3.7e-34;
0; Mismatches 163;
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Page 14
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Maximum Match 100%
Listing first 45 summaries
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Maximum DB seq length: 2000000000
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Gapop 10.0 , Gapext 1.0
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1: gb_ba:*
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Copyright (c) 1993 - 2003 Compugen Ltd.
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Pred. No. is the number of results predicted by chance to have

score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

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ALIGNMENTS

AUTHORS TITLE	REFERENCE	ORGANISM	KEYWORDS	DEFINITION ACCESSION	RESULT 1 HCC18SRRN/c LOCUS
Okeke,C.N., Kappe,R., Zakikhani,S., Nolte,O. and Sonntag,H.G. Ribosomal genes of Histoplasma capsulatum var. duboisii and var. farciminosum	Bukaryota; kungi; Ascomycota; rezizumycotina; zurotiomyces, Onygenales; Onygenaceae; Ajellomyces. 1 (bases 1 to 1704)	Ajellomyces capsulatus	A/3300.1 G1.1413047 18S ribosomal RNA; 18S rRNA gene; small subunit ribosomal RNA. hiellomyres cansulatus	tum ssp. dubois	HCC18SRRN 1704 bp DNA linear PLN 10-DEC-1999

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                                                                                                                                                                                                                                                                                                                                                                     Ajellomyces capsulatus.
Ajellomyces capsulatus
Eukaryota; Fungi; Ascomycota; Pezizomycotina;
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99114487
                                                                                                                                                                                                                                                                                                                         Okeke, C.N., Kappe, R., Zakikhani, S., Nolte, Ribosomal genes of Histoplasma capsulatum
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/product="18S r11
364 c 471
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/strain="CBS205.35, CBS478.64"
/sub_species="farciminosum"
/db_xref-"taxon:5037"
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/strain="CBS175.57"
/sub_species="duboisii"
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                                                              Ajellomyces capsulatus.
Ajellomyces capsulatus
Eukaryota; Fungi; Ascomycota; Pezizomycotina;
      Onygenales; Onygenaceae; Ajellomyces.

1 (bases 1 to 1726)

Kasuga, T., White, T.J. and Taylor, J.W.
The Molecular Clock in Fungi in the C
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Ajellomyces capsulatus ATCC26032
sequence.
AF320009
Unpublished
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3 (bases 1 to 1713)
Berbee,M.L. and Taylor,J.W.
Convergence in ascospore discharge mechanism among pyrenomycete
fungi based on 18s ribosomal RNA gene sequence
Mol. Phylogenet. Evol. 1 (1), 59-71 (1992)
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Atlantic Avenue, Alameda CA 94501, USA
2 (bases 1 to 1713)
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Ajellomyces capsulatus
Eukaryota; Fungi; Ascomycota; Pezizomycotina;
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/note="missing approx. 38 bases
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Shintani.T. and Matsumoto,Y.
Aspergillus niger gene for 18S rRNA
published Only in DataBase (1999)
C (bases I to 494)
Shintani.T. and Watsumoto,Y.
Direct Submission
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                                                                                                                                                                                                                                                                                                                                    Submitted (10-AUG-1999) Tomoyoshi Shintani, Industrial Research Center of Ehime Prefecture, Laboratory of Food Process; 487-2 Kumekubota, Matsuyama, Ehime 791-1101, Japan
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Eurotiales; Trichocomaceae; mitosporic Trichocomaceae; Aspergillus.
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ribosomal RNA, partial sequence.
                                                                                                                  2 CGAAGTCGAGGCTTTCAGCATG 23
                                                                                                                                                                                                                                                                                                           (E-mail:shintani@iri.pref.ehime.jp, URL:www.iri.pref.ehime.jp, Tel:81-89-976-7612, Fax:81-89-976-7313)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Similarity
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                                                                                         CGAAGTCGAGGTTTTCAGCATG
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        /organism="Ajellomyces capsulatus"
/strain="ATCC26032; G217B"
/db_xref="ATCC:26032"
/db_xref="taxon:5037"
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371 c 475 g 440 t
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                                                                                                                                                                                                                                  /db_xref="taxon:5061"
<1..>494
                                                                                                                                                                                                                                                         /organism="Aspergillus niger"
/strain="IEF1"
                                                                                                                                                                                                          /product="18S ribosomal RNA"
100 c 121 g 131 t
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95.5%;
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Pred. No.
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Pred. No. 11;
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Mies ESS-6640 18S
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AUTHORS
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AF113712/c
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134 CGAAGTCGAGGTTTTCAGCATG 113
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Direct Submission
Submitted (31-AUG-1998) Department of Botany, NHB-166, Submitted (31-AUG-1998) Department of Botany, 10th & Institution, National Museum of Natural History, 10th & Constitution Avenue NW, Washington, DC 20560-0166, USA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Stenroos, S.K. and DePriest, P.T.
SSU rDNA phylogeny of cladonilform lichens
Am. J. Bot. 85, 1548-1559 (1998)
2 (bases 1 to 786)
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AF088252.1
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1 (bases 1 to 969)

Platt, J. L. and Spatafora, J. W.

Evolutionary relationships of nonsexual lichenized fungi: molecular phylogenetic hypotheses for the genera Siphula and Thamnolia from SSU and LSU rDNA analyses

O (bases 1 to 969)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               sequence.
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                                                                                                                                                                                                                 Direct Submission
Submitted (16-DEC-1998) Department of Botany & Plant Pathology,
Oregon State University, 2082 Cordley Hall, Corvallis, OR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Dibaeis baeomyces small
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Platt, J.L. and Spatafora, J.W.
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<1. .>786
                                                                                                  /organism="Dibaeis bacomyces"
/db_xref="taxon:83478"
<1...>969
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              /product="18S ribosomal RNA"
/note="small subunit ribosomal RNA"
161 c 198 g 219 t
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/db_xref="taxon:88650"
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                                                            /product="small subunit ribosomal RNA" 189 c 243 g 268 t 1 oth
                                                                                                                                                                       1. .969
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95.5%;
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18S rRNA,

partial sequence.

Aspergillus

PLN 14-OCT-1999

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AF107345/c
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                                                                                                                                                                                                                                                                                                                                                                                                          117
                                              Eukaryota: Fungi; Ascomycota; Pezizomycotina; Leotiomycetes; Rhytismatales; Rhytismataceae; Cyclaneusma.

1 (bases 1 to 1031)
Gernandt, D.S., Platt, J.L., Stone, J.K., Spatafora, J.W., Holst-Jensen, A., Hamelin, R.C. and Kohn, L.M.
Phylogenetics of Helotiales and Rhytismatales based on partial small subunit nuclear ribosomal DNA sequences
Mycologia 93 (5), 915-933 (2001)
2 (bases 1 to 1031)
3 (bases 1 to 1031)
6 Gernandt, D.S., Platt, J.L., Stone, J.K., Spatafora, J.W., Holst-Jensen, A., Hamelin, R.C. and Kohn, L.M.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     128
                                                                                                                                                                                                                                                                                   sequence.
AF203458
    Submitted (12-NOV-1999) Department of Botany and Plant Pathology, Oregon State University, 2082 Cordley Hall, Corvallis, OR
                                                                                                                                                                                                                         Cyclaneusma minus.
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                                           Direct Submission
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Submitted (18-NOV-1998) Botany & Plant Pathology, Oregon State
University, 2082 Cordley Hall, Corvallis, OR 97331, USA
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 2 (bases 1 to 990) Platt, J.L. and Spatafora, J.W.
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189 c 248 g 284 t
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/isolate="OSC56400"
/db_xref="taxon:83478"
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                                                         Amylocarpus encephaloides small U45438
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 Amylocarpus
Amylocarpus
                                             U45438.1
                                                                                                                                                                                  2 CGAAGTCGAGGCTTTCAGCATG 23
                                                                                                                                                                                                                                                                                                                                                                                                                  published Only in DataBase (1999)

2 (bases 1 to 1054)

Shintani T. and Matsumoto, Y.

Direct Submission

Submitted (10-AUG-1999) Tomoyoshi Shintani, Industrial Research
Center of Ehime Prefecture, Laboratory of Food Process; 487-2

Kumekubota, Matsuyama, Ehime 791-1101, Japan
(E-mail:shintani@iri.pref.ehime.jp, URL:www.iri.pref.ehime.jp,
Tel:81-89-976-7313)

Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Eukaryota; Fungi; Ascomycota; Pezizomycotina; Eurotiomycetes; Eurotiales; Trichocomaceae; mitosporic Trichocomaceae; Asperg 1 to 1054)
Shintani, T. and Matsumoto, Y. Aspergillus awamori gene for 185 rRNA, partial sequence
                                                                                                                                                                                                                                         Similarity
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Aspergillus niger var.
AB030917
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18S rRNA; 18S ribosomal RNA.
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                                             GI:1736923
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/product="18s ribosomal RNA"
215 c 274 g 277 t
                                                                                                                                                                                                                                                                                                                                           /note="synonym:Aspergillus awamori"
                                                                                                                                                                                                                                                                                                                                                      /db_xref="taxon:105351"
                                                                                                                                                                                                                                                                                                                                                                            /strain-"IEF2"
                                                                                                                                                                                                                                                                                                                                                                                    organism="Aspergillus awamori"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   /organism="Cyclaneusma minus"
/strain="93197"
/specific_host="Pinus sylvestris"
/db_xref="taxon:64355"
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072712
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                                                                                                                                                                                                                                                                                                  1 (bases 1 to 1648)
Stenroos,S., Lohtander,K. and Tehler,A.
Direct Submission
Submitted (27-SEP-1996) Botany, National Museum of Natural History,
Smithsonian Institution, NHB-166, 10th St. & Constitution Ave.,
Washington, DC 20560, USA
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   SCU72712
Siphula ceratites 18S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Landvik, S., Shailer, N.F.J. and Eriksson, O.E. SSU rDNA sequences support for a close relationship Elaphomycetales and the Eurotiales and Onygenales Mycoscience 37, 237-241 (1996)
              AN18SRR 1673 bp DNA
A.niger (isolate CBS102.12) 18S rRNA gene
X78538
                                                                                                                     2 CGAAGTCGAGGCTTTCAGCATG 23
                                                                                                                                                                                                                                                                                                                                                                                              Eukaryota; Fungi; Ascomycota; Pezizomycotina; Lecanoromycetes; Lecanoromycetes incertae sedis; Icmadophilaceae; Siphula.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              2 (bases 1 to 1479)
Landvik,S., Shailer,N.F.J. and Eriksson,O.E.
Direct Submission
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1 (bases 1 to 1479)
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                                                                                                                                                                                                                        /product="18S small subunit ribosomal RNA" 343 c 442 g 439 t
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                                                                                                                                                                                                                                                              organism="Siphula ceratites"

/db_xref="taxon:53373"
                                                                                                                                                                                                                                                                                        1. .1648
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/strain="UME 29765"
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131 CGAAGTCGAGGTTTTCAGCATG
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Aspergillus niger
Eukaryota; Fungi; Ascomycota; Pezizomycotina; Eurotiomycetes;
Eurotiales; Trichocomaceae; mitosporic Trichocomaceae; Aspergillus 1 to 1673)
1 (bases 1 to 1673)
                                                                                                                                                                                                                                                                                                                                                                                                                         18S ribosomal RNA; 18S rRNA gene.
Paecilomyces variotii.
Paecilomyces variotii
Eukaryota; Fungi; Ascomycota; Pezizomycotina; Eurotiomycetes;
Eurotiales; Trichocomaceae; mitosporic Trichocomaceae;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Melchers,W.J., Verweij,P.E., van den Hurk,P., van Belkum,A., De Pauw,B.E., Hoogkamp-Korstanje,J.A. and Meis,J.F. General primer-mediated PCR for detection of Aspergillus species J. Clin. Microbiol. 32 (7), 1710-1717 (1994)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Paecilomyces variotii 185 rRNA g
Y13996
                                                                                                                                                                                                                                          Submitted (24-JUN-1997) Kappe R., Hygiene Institute, Heidelberg, Im Neuenheimer Feld 324 D-69120 GERMANY
                                                                                                                                                                                                                                                                                                                                                       1 (bases 1 to 1678)
Zakikhani,S., Okeke,C.N. and Kappe,R.
18S rDNA sequence of Paecilomyces var
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             2 (bases 1 to 1673)
Melchers, W.J.G.
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/isolate="CBS102.12"
/db_xref="taxon:5061"
<1. .>1673
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                                                                                                                            /organism="Paecilomyces
/strain="CBS339.51"
/isolate="Man, sputum"
/db_xref="taxon:45996"
 /evidence-experimental
363 c 467 g
                                  /gene="18S rRNA"
/product="18S ribosomal RNA"
                                                                                       /gene="18S rRNA"
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Search completed: June 12, 2003, 02:33:49 Job time: 351.269 secs
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                                                                                                                                                                                                             BASE COUNT
ORIGIN
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SOURCE
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AF113713/c
LOCUS
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VERSION
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                                                                                                                                     Query Match 88.7%; Score 20.4; I Best Local Similarity 95.5%; Pred. No. 12; Matches 21; Conservative 0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Query Match 88.7%; Score 20.4; I Best Local Similarity 95.5%; Pred. No. 12; Matches 21; Conservative 0; Mismatches
                                                                 2 (bases 1 to 1686)
Platt, J.L. and Spatafora, J.W.
Direct Submission
Submitted (16-DEC-1998) Department of Botany & Plant Pathology,
Oregon State University, 2082 Cordley Hall, Corvallis, OR
97331-2902, USA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  AF113713
1686 bp DNA linear PLN 06-DEC-1999
Dibaels bacomyces isolate OSC53939 small subunit ribosomal RNA
gene, partial sequence.
AF113713
AF113713.1 GI:6502559
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       l (bases 1 to 1686)
Platt, J.L. and Spatafora, J.W.
Evolutionary relationships of nonsexual lichenized fungi: molecular bylogenetic hypotheses for the genera Siphula and Thamnolia from SSU and LSU rDNA analyses
Unpublished
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/organism="Dibaeis baeomyces"
/isolate="OSC53939"
/db_xref="taxon:83478"
<1. .>1686
/product="small subunit ribosomal RNA"
product="small subunit ribosomal RNA"
4 346 c 438 g 460 t 1 other
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                                                                                                                                                                    DB 8; Length 1686;
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Maximum DB seq
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Copyright (c) 1993 - 2003 Compus
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DNA encoding a het	1gen	DNA encoding a pro	Sequence encoding	Antibody CC49/anti	DNA (SEQ ID NO:22)	region	DNA encoding a sin	DNA encoding bival	Fusion polypeptide	DNA encoding a pro	CC49 VL / 217 / 4-	Sequence encoding	Human cDNA clone r	Human cDNA 5'-end	Neisseria gonorrhe	Cat flea head and		Rhodococcus sp. OH	Rhodococcus corall	Drosophila melanog	DNA encoding novel	Human secreted pro	Bacillus lichenifo	Fibrobacter succin	DNA sequence used	DNA encoding novel	derí	#3188 used t	Probe #3336 used t	#3229 for g	bone n	Human brain expres	Probe #3226 for ge	foetal	Human breast cell

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ALIGNMENTS

RESULT 1 AAQ73433

AAQ73433 standard; DNA; 22

ВP

18-MAY-1995

(first entry)

AAQ73433;

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Probe; detection; Histoplasma capsulatum; 18S; rRNA; rDNA; hybridisation; Saccharomyces cerevisiae; fungus; phylogenetic; helper probe; soil; water; Blastomyces dermatitidis; quantitation; sample; body fluid; ss. Synthetic. Histoplasma Milliman CL; US5352579-A. 28-JUN-1991; 28-JUN-1991; 04-OCT-1994. (GENP-) GEN-PROBE INC capsulatum-specific DNA hybridisation 91us-0720587. 91US-0720587.

Hybridisation probe specific for Histoplasma capsulatum - allowing differentiation from all other fungi for detection

WPI; 1994-316178/39.

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quantitation

in body fluids, etc

Column

8pp; English.

A probe (AAQ73433) or its complement (AAQ73436) and corresponding

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RESULT 2
AAQ73436/c
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Best Local :
A probe (AAQ73433) or its complement (AAQ73436) and corresponding RNA sequences (AAQ73437 and AAQ86436) used for the specific detection of all strains of Histoplasma capsulatum (H.C.). The probes are manufactured complementary to the H.C. 18s rRNA or rDNA gene. This region also rorresponds to the bases 172-193 of Saccharomyces cerevisiae 18s rRNA. The probe is specific for H.C. and can be used to distinguish the fungus from all others, even its nearest phylogenetic neighbour Blastomyces dermatitidis. Nucleic acid hybridisation of the specific probe is enhanced by the use of helper probes (AAQ73434-5). This method allows the detection and/or the quantitation of H.C. from samples e.g. body
                                                                                                                                                                                       Claim 9; Column 12;
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                                                                                                                                                                                                                              Hybridisation probe specific for Histoplasma capsulatum - allowing differentiation from all other fungi for detection
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                                                                                               A probe (AAQ73433) or its complement (AAQ73436) and corresponding RNA sequences (AAQ73437 and AAQ86436) used for the specific detection of all strains of Histoplasma capsulatum (H.C.). The probes are manufactured complementary to the H.C. 18s TRNA or TDNA gene. This region also corresponds to the bases 172-193 of Saccharomyces cerevisiae 18s TRNA. The probe is specific for H.C. and can be used to distinguish the fungus from all others, even its nearest phylogenetic neighbour Blastomyces dermatitidis. Nucleic acid hybridisation of the specific probe is enhanced by the use of helper probes (AAQ73434-5). This method allows the detection and/or the quantitation of H.C. from samples e.g. body fluids, tissue samples, soil and water.
                                                                                                                                                                                                                                                                                    Hybridisation probe specific for Histoplasma capsulatum - allowing differentiation from all other fungi for detection quantitation in body fluids, etc.
                                                                                Sequence
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AAQ73437
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Probe; detection; Histoplasma capsulatum; 18S; rRNA; rDNA; hybridisation; Saccharomyces cerevisiae; fungus; phylogenetic; helper probe; soil;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Histoplasma capsulatum-specific
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AAQ73437;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       US5352579-A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Synthetic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     water; Blastomyces dermatitidis; quantitation; sample;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     18-MAY-1995
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Sequence
                                                                                                                                                                                                                                                                                                                                                                                                 (GENP-) GEN-PROBE INC.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 fluids, tissue samples, soil and water.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TOCAT.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         22
                                        Similarity
CGAAGTCGAGGCTTTCAGCATG 23
                                                                              22 BP; 5
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      standard; RNA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      CGAAGTCGAGGCTTTCAGCATG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            22
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        BP; 5 A; 7 C; 5 G; 5 T; 0 other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                          91US-0720587
                                                                                                                                                                                                                                                                                                                                                                                                                                                   910S-0720587.
                                                                           A; 7 C; 5 G; 5 U; 0 other;
                                      95.7%;
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                           0
                                      Score 22;
Pred. No.
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                          Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      RNA hybridisation probe.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Mismatches
                                      NO.
                                      DB 15;
. 0.14;
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0.14;
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                                              Length 22
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                        Indels
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body fluid;
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                       Gaps
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RESULT 5
AAF11545;
ID AAF11545;
XX
AAF11545;
AC AAF11545;
XX
DT 13-MAR-2001 (first
XX
DE Aspergillus niger ES
XX
KW Multiple gene expres
KW expressed sequence t
KW Aspergillus oryzae;
KW culture condition; c
KW metabolic pathway er
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Best Local S
Matches 17
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                                                                                                                                                                                                                                                                                                                                                                                                                                   A probe (AAQ73433) or its complement (AAQ73436) and corresponding RNA sequences (AAQ73437 and AAQ86436) used for the specific detection of all strains of Histoplasma capsulatum (H.C.). The probes are manufactured complementary to the H.c. 18s rRNA or rDNA gene. This region also corresponds to the bases 172-193 of Saccharomyces cerevisiae 18S rRNA. The probe is specific for H.c. and can be used to distinguish the fungus from all others, even its nearest phylogenetic neighbour Blastomyces dermatitidis. Nucleic acid hybridisation of the specific probe is enhanced by the use of helper probes (AAQ73434-5). This method allows the detection and/or the quantitation of H.c. from samples e.g. body
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Hybridisation probe specific for Histoplasma capsulatum - allowing differentiation from all other fungi for detection quantitation in body fluids, etc.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Synthetic.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     water; Blastomyces dermatitidis;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Saccharomyces cerevisiae;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Probe; detection; Histoplasma capsulatum; 18S; rRNA; rDNA; hybridisation;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Histoplasma
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          US5352579-A
                                                                                                                                                                                                                                                                                                                                                                                         Sequence 22
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Claim 9; Column 13; 8pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       WPI; 1994-316178/39
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                 Multiple gene expression; filamentous fungal cell; EST; expressed sequence tag; Fusarium venenatum; Aspergillus niger; Aspergillus oryzae; Trichoderma reesei; identification; recombination; culture condition; environmental stress; spore morphogenesis;
                                                                                               Aspergillus niger EST SEQ
                                                                                                                                                                                                                                                                                                                                . Similarity
17; Conser
                                                                                                                                                                                                                                                                                                                                                                                                                      tissue samples, soil and water.
                                                                                                                                                                                                                                                                                                 CGAAGTCGAGGCTTTCAGCATG 23
                                                                                                                                                                                                                                                                     CGAAGUCGAGGCUUUCAGCAUG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 capsulatum-specific complementary RNA hybridisation probe
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                                                                                                                                                                                                                                                                                                                                Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                (first entry)
                                                                                                                             (first entry)
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                9105-0720587.
      engineering;
                                                                                                                                                                                         CDNA;
                                                                                                                                                                                                                                                                                                                                             95.7%;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     fungus; phylogenetic;
                                                                                              ID NO:4068
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ВP
                                                                                                                                                                                                                                                                                                                             ; Score 22;
pred. No. |
5; Mismatcl
      catabolic pathway
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                                                                                                                                                                                                                                                                                                                                  Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     quantitation; sample;
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sample; body fluid;
                                                                                                                                                                                                                                                                                                                                                             Length 22;
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CC expression of the same genes in one or more second filamentous fungal CC cells. The method uses fluorescence-labeled nucleic acids isolated from the Fr cells and a substrate of expressed sequence tags (EST). The ESTs CC are used in the methods for monitoring differential expression of genes CC in a first filamentous fungal (FF) cell relative to expression of the genes in one or more second filamentous fungal cells. Monitoring CC same genes in one or more second filamentous fungal cells Monitoring CC the global expression of genes from FF cells allows the production potential of the microorganisms to be improved. New genes may be CC discovered, possible functions of unknown open reading frames can be clientified and gene copy number variation and stability can be consitored. The expression of genes can be used to study how FF cells adapt to changes in culture conditions, environmental stress, spore compineering. Using ESTs provides several advantages over genomic or crandom cDNA clones including elimination of redundancy as one spot on an CC random cDNA clones including elimination of redundancy as one spot on an CC array equals one gene or open reading frame, and organisation of the carray equals one gene or open reading frame, and organisation of the canalysis of the results. AAF01748 to AAF11247 represents ESTs from Aspergillus oryzae; and CC altitate to AAF11873 represents ESTs from Aspergillus oryzae; and CC altitate to AAF114878 represents ESTs from Aspergillus oryzae; and call to AAF114879 to AAF124878 represents ESTs from Aspergillus oryzae; and call to AAF114878 to AAF114878 represents ESTs from Aspergillus oryzae; and CC altitate to AAF14878 represents ESTs from Saccoder, which are
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         OVON)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Monitoring differential expression of genes in uses fluorescence-labeled nucleic acids isolate
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     The present invention describes a method for monitoring differential expression of genes in a first filamentous fungal (FF) cell relative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Claim 87; Page 1791-1792; 3161pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              substrate of expressed sequence tags
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 22-MAR-1999;
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                                           all specifically claimed in the present invention.
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) NOVO NORDISK AS.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  sion of genes in a first filamentous fungal (FF) cell relative
sion of the same genes in one or more second filamentous fungal
The method uses fluorescence-labeled nucleic acids isolated fr
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        enes in filamentous isolated from the c
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          s fungal cells
cells and a
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Sequence 568 B₽; 155 A; 116 C; 141 G; 150 T; 6 other;

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                                     Query Match
Best Local (
                               Matches
178 CGAAGTCGAGGTTTTCAGCATG 157
               N
                                       Similarity
                CGAAGTCGAGGCTTTCAGCATG
                               Conservative
                                       88.7%;
95.5%;
                               0
                                      Score 20.4;
Pred. No. 1
                23
                               Mismatches
                                                B
                                               21;
                               1;
                                               Length
                                0
                                Gaps
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0

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RESULT 6
AAZ00859/c .
ID AAZ00859 standard; DNA; 1733
                     A. fumigatus
                                  11-OCT-1999
                                             AAZ00859;
                       185
                                 (first entry)
                       DNA.
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Detection;

invasive infection; haematology;

diagnosis; 18S rRNA; aspergillosis;

suppression; oncology;

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Best Local S
Matches 20
                                                                                                                                                                                                                                                                                                                                                      acid (I) in a body sample which comprises the isolation of (I) followed by a two-step polymerase chain reaction (PCR) amplification of any nucleic acid having a sequence essentially homologous to part of the 3'-end of the Aspergillus 18s rRAA gene using primers used in the first step that do not overlap with those in the second step. The method is invasive infections in hematological-oncological patients with long-term overlapping primers, this process provides efficient and reliable detection of Aspergillus in clinical situations. It is specific for Aspergillus (it detects the species terreus, niger, versicolor, clavatus, other genera). This sequence represents the DNA sequence of Aspergillus
                                                                          US6294328-B1
                                                                                             Mycobacterium
                                                                                                             Mycobacterium tuberculosis; strain H37Rv; strain variation; epidemiology; patient treatment; epide
                24-JUN-1998;
                                   24-JUN-1998;
                                                                                                                                               Mycobacterium
                                                       25-SEP-2001.
                                                                                                                                                                   15-JAN-2002
                                                                                                                                                                                                        AAI99683 standard; DNA; 4403765
                                                                                                                                                                                                                                                                                                                                       Sequence 1733
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Detecting Aspergillus nucleic acid in body samples by two-step polymerase chain reaction, for diagnosing aspergillosis
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Claim
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   WPI; 1999-470047/40
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Buchheidt D,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 16-FEB-1998;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         (BUCH/) BUCHHEIDT D.
(HEHL/) HEHLMANN R.
(SKLA/) SKLADNY H.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       19-AUG-1999
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Aspergillus fumigatus
                                                                                                                                                                                                                                                       153 CGAAGTCGAGGTTTTTAGCATG 132
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                invention describes a novel method for detecting Aspergillus nucleic (I) in a body sample which comprises the isolation of (I) followed
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 2; F1g 1; 16pp; German.
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                                                                                                                                                                                                                                                                                                        Similarity
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                                                                                                                                                                                                                                                                                               Conservative
                                                                                                                                                                 (first entry)
                                                                                                                                                                                                                                                                                                                                      BP;
                                                                                            tuberculosis
                                                                                                                                            tuberculosis strain H37Rv genome SEQ ID
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Hehlmann
               9805-0103840
                                 9805-0103840
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   98DE-1006274.
                                                                                                                                                                                                                                                                                                                                  446 A; 374 C; 475 G; 438 T; 0 other;
                                                                                                                                                                                                                                                                                                      81.7%;
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Pred. No. 1
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                                                                                                                                                                                                                                                                                             Mismatches
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                                                                                                           crain CDC 1551; genome epidemic monitoring;
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RESULT 8
AAI99682
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Best Local S
Matches 19
Evaluating strain variation of Mycobacterium tuberculosis, comprises determining the nucleotide sequence of the strain at positions in the genome corresponding to positions where M. tuberculosis strains CDC 1551 and H37Rv differ
                                                                                   WPI; 2001-647261/74.
                                                                                                                      Fleischmann RD,
                                                                                                                                                                                           24-JUN-1998;
                                                                                                                                                                                                                             24-JUN-1998;
                                                                                                                                                                                                                                                                                                                                                             Mycobacterium tuberculosis; variation; epidemiology; pat
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 specification,
at segdata
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     The invention relates to evaluating strain variation within and between different populations of the tuberculosis bacterial pathogen, Mycobacterium tuberculosis or related Mycobacterium by determining the nucleotide sequence of the first strain at positions in the complete sequence of the genome that correspond to positions that differ in the nucleotide sequences of M. tuberculosis strains CDC 1551 (AA199683) and H37Rv (AA199683). The method is useful for evaluating strain variation (tuberculosis and has valuable application in the fields of tuberculosis genetics, epidemiology, patient treatment and epidemic
                                                                                                                                                                                                                                                              25-SEP-2001.
                                                                                                                                                                                                                                                                                                 US6294328-B1
                                                                                                                                                                                                                                                                                                                                Mycobacterium
                                                                                                                                                        (GENO-) INST GENOMIC RES.
                                                                                                                                                                                                                                                                                                                                                                                                            Mycobacterium tuberculosis strain H37Rv genome SEQ ID
                                                                                                                                                                                                                                                                                                                                                                                                                                                      15-JAN-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AAI99682;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    AAI99682 standard; DNA; 4411529 BP
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Claim 4; SEQ ID NO 2; 3pp + Sequence Listing; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    monitoring.
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1551 ar
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Evaluating strain variation of Mycobacterium tuberculosis, comprises determining the nucleotide sequence of the strain at positions in the genome corresponding to positions where M. tuberculosis strains CDC
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        te: The sequence data for this patent did not form part of the printed ecification, but was obtained in electronic format directly from USPTO sequence.html?DocID=6294328B1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              2001-647261/74.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1 DCGAAGTCGAGGCTTTCAGCATG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              19;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TCGCTGTCGAGGCTTTCACCATG 172071
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               RD,
                                                                                                                                                                                                                                                                                                                                                                                                                                                  (first entry)
                                                                                                                                                                                                                                                                                                                                tuberculosis
                                                                                                                                                                                         98US-0103840
                                                                                                                                                                                                                          98US-0103840
                                                                                                                      White
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               White OR,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         75.7%;
82.6%;
                                                                                                                      OR,
                                                                                                                                                                                                                                                                                                                                                           is; strain H37Rv; strain CDC patient treatment; epidemic
                                                                                                                    Fraser CM,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Fraser CM,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Score 17.4;
Pred. No. 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          23
                                                                                                                  Venter JC;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Venter JC;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        .1e+02;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        DB 22;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Ψ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          <u>ი</u>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Length 4403765;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Indels
                                                                                                                                                                                                                                                                                                                                                         monitoring; ds.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     757371 T; 189 other;
                                                                                                                                                                                                                                                                                                                                                                           1551; genome;
                                                                                                                                                                                                                                                                                                                                                                                                              ð
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Claim 3;

SEQ

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3pp +

Sequence Listing; English.

XSSSSSSSSSSSSSSXXX

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RESULT
ABA0115
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Best Local
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Best Local S
Matches 19
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       The invention relates to evaluating strain variation within and between different populations of the tuberculosis bacterial pathogen, Mycobacterium tuberculosis or related Mycobacterium by determining the nucleotide sequence of the first strain at positions in the complete sequence of the genome that correspond to positions that differ in the nucleotide sequences of M. tuberculosis strains CDC 1551 (AAI99683) and H37RV (AAI99682). The method is useful for evaluating strain variation of M. tuberculosis and has valuable application in the fields of tuberculosis genetics, epidemiology, patient treatment and epidemic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Note: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format directly from USPTO
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Sequence 4411529 BP;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ABA01152
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 monitoring.
                                                                                                                                           The present invention relates to a new microbe of Acinetobacter or Burkholderis genus producing aldonic acid and oxidising specifically hemiacetal hydroxy group of a saccharide having said hydroxy group. Aldonic acid is used as a mineral reinforcing agent. The present sequ
                                                                                                                                                                                                               Disclosure;
                                                                                                                                                                                                                                         Acinetobacter
                                                                                                                                                                                                                                                      A new microbe
                                                                                                                                                                                                                                                                                                        (OSAQ
                                                                                                                                                                                                                                                                                                                                                 27-DEC-1999;
                                                                                                                                                                                                                                                                                                                                                                        26-DEC-2000;
                                                                                                                                                                                                                                                                                                                                                                                                   11-SEP-2001
                                                                                                                                                                                                                                                                                                                                                                                                                            JP2001245657-A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                     Deuteromycetes
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Aldonic acid; ds.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Deuteromycetes polynucleotide
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    24-JAN-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ABA01152;
                                                                                                      Sequence 1745
                                                                                                                                                                                                                                                                                                                      (TAKE-)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Local
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       seqdata.uspto.gov/sequence.html?DocID=6294328B1.
                                                                                                                                  used to
                                                                                                                                                                                                                                                                                2002-002933/01.
167
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             19;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1 DCGAAGTCGAGGCTTTCAGCATG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Similarity
                          N
                                                   . Similarity
19; Conser
                                                                                                                                                                                                                                                                                                        OSAKA CITY.
                                                                                                                                                                                                                                                                                                                      TAKEHARA KAGAKU KOGYO
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       standard; DNA; 1745
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TCGCTGTCGAGGCTTTCACCATG 171902
CGAAGTCGGGGTTTTTAGCATG
                         CGAAGTCGAGGCTTTCAGCATG 23
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Conservative
                                                                                                                                  illustrate the present invention.
                                                                                                                                                                                                               Page 17; 22pp; Japanese
                                                     Conservative
                                                                                                                                                                                                                                                                                                                                                                          2000JP-0394766
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    (first entry)
                                                                                                                                                                                                                                         for producing aldonic acid, or Burkholderis -
                                                                                                        BP;
                                                                                                                                                                                                                                                                                                                                               99JP-0369714.
                                                                                                                                                                                                                                                                                                                                                                                                                                                       gp
                                                                                                        448
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          75.7%;
82.6%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 758565
                                                              74.8%;
86.4%;
                                                                                                        P
                                                                                                        382
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1; Mismatches
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                                                   0;
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                                                                Score 17.2;
Pred. No. 66;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            SEQ
                                                                                                                                                                                                                                                                                                                       X
                                                                                                        465 G;
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  146
                                                     Mismatches
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                                                                                                          450 T;
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1.1e+02;
hes 3;
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                                                                                                                                                                                                                                                       comprises
                                                                               DB
                                                                               24;
                                                                                                          0 other;
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                                                                               Length
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                                                                                                                                                                                                                                                        new
                                                                               1745;
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                                                     Gaps
                                                                                                                                                  sequence
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                                                                                                The invention relates to a spatially-addressable set of single exon cc nucleic acid probes for measuring gene expression in a sample derived from human breast and BT 474 cells. The method involves contacting cc the probes with a collection of detectably labelled nucleic acids cound to each probe of the microarray. The probes are useful for cc verifying the expression of regions of genomic DNA predicted to cc encode proteins. They are useful for gene discovery, and for cc expression analysis is useful for prognosing breast disease. Gene cc expression analysis is useful for assessing the toxicity of chemical cc diversity of probes for measuring gene expression, with far less bias cc crapid production of functional information from genomic sequence. The present sequence is a single exon nucleic acid probe of the invention. Cc Note: The sequence is a single exon nucleic acid probe of the invention. The specification, but was obtained in electronic format directly cc from WIPO at ftp.wipo.int/pub/published_pct_sequences.
                             Matches
                                                   Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              03-AUG-2000;
21-SEP-2000;
27-SEP-2000;
04-OCT-2000;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Human; microarray; single exon probe; disease; cancer; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  01-FEB-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ABA44550 standard; DNA; 454
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               04-FEB-2000; 2000US-0180312
26-MAY-2000; 2000US-0207456
30-JUN-2000; 2000US-0608408
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Human breast cell
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ABA44550;
                                                                                                                                                                                                                                                                                                                                                                   New spatially-addressable set of single useful for measuring gene expression in breast, comprises number of single exon
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   30-JAN-2001; 2001WO-US00662
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              09-AUG-2001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      WO200157271-A2
                                                                                                                                                                                                                                                                                                                                               Claim
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        (MOLE-) MOLECULAR DYNAMICS INC
                                                                            Sequence
                                         Local
                                                                                                                                                                                                                                                                                                                                                                                                                        2001-496933/54.
                                                                                                                                                                                                                                                                                                                                                                                                                                                SG,
                                                                                                                                                                                                                                                                                                                                               1;
   4
                             l Similarity
18; Conser
                                                                                                                                                                                                                                                                                                                                              SEQ ID NO 3245; 327pp + sequence listing; English
                                                                              454
   AAGTCGAGGCTTTCAGCATG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                2000US-0608408.
2000US-0632366.
2000US-0234687.
2000US-0236359.
2000US-0024263.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    (first entry)
                             Conservative
                                                                            BP;
                                                                                                                                                                                                                                                                                                                                                                                                                                                 DK,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           single exon
                                                                              135 A;
                                         73.0%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                 Chen
                                                                               84
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                             0
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                                          Score 16.8;
Pred. No. 9
                                                                               120
                                                                                                                                                                                                                                                                                                                                                                                                                                                 Rank DR;
     23
                               Mismatches
                                                                               င္ပ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 gene
                                                                               115
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           acid probe #3245
                                                                                                                                                                                                                                                                                                                                                                    sample derived from
nucleic acid probes
                                                                               Η,
                                                      DB
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    expression; breast;
                                                                               0
                                                                               other;
                                                      Length
                               Indels
                                                         454;
                                                                                                                                                                                                                                                                                                                                                                                      human
                               0
                               Gaps
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201

AAGTAGAGGCTTTCTGCATG

182

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RESULT 11
ABA54997/c
ID ABA54997 standard; DNA; 454 BI
XX
AC ABA54997;
XX

DT 01-FEB-2002 (first entry)
XX

DX Human; foetal liver; gene expi
XX

PN W0200157277-A2.

XX

PN W0200157277-A2.

XX

PN W0200157277-A2.

XX

PN W0200157277-A2.

XX

PN 09-AUG-2001; 2000US-0180312.
PR 26-MAY-2000; 2000US-024266.
PR 30-JUN-2000; 2000US-0608408.
PR 30-JUN-2000; 2000US-0608468.
PR 30-JUN-2000; 2000US-0234667.
PR 21-SEP-2000; 2000US-0234667.
PR 21-SEP-2000; 2000US-0236359.
PR 03-AUG-2000; 2000US-0234687.
PR 27-SEP-2000; 2000US-0236359.
PR 04-OCT-2000; 2000US-0236359.
PR 04-OCT-2000; 2000US-0236359.
PR 04-OCT-2000; 2000US-0236359.
PR 1-FEB-2000; 2000US-0236359.
PR 04-OCT-2000; 2000US-0236359.
PR 1-FEB-2000; 2000US-0236359.
PR 27-SEP-2000; 2000US-02366.
PR 27-SEP-2000; 2000US-0236359.
PR 27-SEP-2000; 2000US-02366.
PR 27-SEP-2000; 2000US-023669.
PR 27-SEP-2000; 2000US-02366.
PR 27-SEP-2000; 2000US-023468.
PR 27-SEP-200
                                                                                                                                                                                                                                                                    RESULT 12
ABA24760/c
ID ABA24760 standard; DNA; 454
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Best Local Similarity
Human; gene expression; heart; microal cardiovascular disease; hypertension; congenital heart disease; ss.
                                                                                                                    Probe #3226
                                                                                                                                                                       23-JAN-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Note: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format directly from WIPO at ftp.wipo.int/pub/published_pct_sequences.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  The invention relates to a single exon nucleic acid probe for measuring human gene expression in a sample derived from human foetal liver. The single exon nucleic acid probes may be used for predicting, measuring and displaying gene expression in samples derived from human fetal liver. The present sequence is a single exon nucleic acid probe of the invention.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Claim 1; SEQ ID NO 3302; 639pp + sequence listing; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Human genome-derived single exon nucleic acid probes useful for analyzing gene expression in human fetal liver -
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Human; foetal liver; gene expression; single exon nucleic acid probe; ss
                                                                                                                                                                                                                                                                                                                                                                                                                     201
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           18;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           MOLECULAR DYNAMICS INC
                                                                                                                                                                                                                                                                                                                                                                                                                                                       AAGTCGAGGCTTTCAGCATG 23
                                                                                                                                                                                                                                                                                                                                                                                                            AAGTAGAGGCTTTCTGCATG 182
                                                                                                           for gene expression
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Conservative
                                                                                                                                                                 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        135 A; 84 C; 120 G; 115 T; 0 other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               73.0%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Chen W,
                 heart; microarray; vascular system; probe; hypertension; cardiac arrhythmia;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               exon nucleic acid probe #3302
                                                                                                                                                                                                                                                                          BP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     0,
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Score 16.8;
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                                                                                                        analysis in
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                                                                                                   human heart cell
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     22;
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                                                                                                   sample.
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epilepsy; cancer; Homo sapiens.

88.

Human; brain expressed exon; gene microarray; Alzheimer's disease; m

e expression analysis; probe; multiple sclerosis; schizophrenia; Human brain expressed single exon

probe SEQ

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NO:

AAK03266; 05-NOV-2001

(first entry)

30-JAN-2001; 2001WO-US00667.

09-AUG-2001.

WO200157275-A2

AAK03266/c ID AAK032

AAK03266 standard; DNA; 454 BP

RESULT 13

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                                                Query Match
Best Local S
Matches 18
                                                                                                                                            measuring human gene expression in a sample derived from human heart. The present sequence is one such probe. The probes may be used for predicting, measuring and displaying gene expression in samples derived from the human heart via microarrays. By measuring gene expression, the probes are useful for predicting, diagnosing, grading, staging, monitoring and prognosing diseases of the human heart and vascular system e.g. cardiovascular disease, hypertension, cardiac arrhythmias and congenital heart disease.
                                                                                             Sequence 454
                                                                                                                                                                                                                                                                                                                                                                                                                                               04-FEB-2000;
26-MAY-2000;
30-JUN-2000;
                                                                                                                         Note: The sequence data for this patent did not form specification, but was obtained in electronic format
                                                                                                                                                                                                                                         The present invention relates to single exon nucleic
                                                                                                                                                                                                                                                                    Claim 1;
                                                                                                                                                                                                                                                                                            Single exon nucleic acid probes for analyzing gene expression hearts -
                                                                                                                                                                                                                                                                                                                             WPI; 2001-488899/53
                                                                                                                                                                                                                                                                                                                                                   Penn
                                                                                                                                                                                                                                                                                                                                                                           (MOLE-)
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27-SEP-2000;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         WO200157274-A2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Homo sapiens.
                                                                                                             ftp.wipo.int/pub/published_pct_sequences.
   201
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                        4
                                              l Similarity
18; Conserv
                                                                                                                                                                                                                                                                                                                                                                        MOLECULAR DYNAMICS INC
AAGTAGAGGCTTTCTGCATG 182
                      AAGTCGAGGCTTTCAGCATG 23
                                                                                                                                                                                                                                                                    SEQ
                                                                                                                                                                                                                                                                                                                                                  Hanzel DK,
                                              Conservative
                                                                                                                                                                                                                                                                                                                                                                                                          2000US-0180312.
2000US-0207456.
2000US-0608408.
2000US-0632366.
2000US-0234687.
2000US-0236359.
                                                                                            BP; 135
                                                                                                                                                                                                                                                                ID No 3226; 530pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                 2000GB-0024263
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           2001WO-US00666
                                                       73.08;
                                                                                       A; 84 C; 120 G; 115 T; 0 other;
                                                                                                                                                                                                                                                                                                                                                  Chen
                                                                                                                                                                                                                                                                                                                                                  Ę
                                             0,
                                                        Pred. No.
                                                                  Score 16.8;
                                                                                                                                                                                                                                                                                                                                                 Rank DR;
                                            Mismatches
                                                                   В
                                                                  22;
                                           2
                                                                Length
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                                                                                                                          part of the printed directly from WIPO
                                                                 454;
                                                                                                                                                                   vascular system
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                                        Gaps
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RESULT 14
AAX28719/c
ID AAX287
XX AAX287
AC AAX287
XX DF Human
XX Human;
KW Human;
KW Microa
XX Homo 9
XX 
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Best Local S
Matches 18
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26-MAY-2000;
30-JUN-2000;
03-AUG-2000;
21-SEP-2000;
27-SEP-2000;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           The present invention provides a number of single exon nucleic acid probes which are derived from genomic sequences expressed in the human brain. They can be used to measure gene expression in brain cell samples which may enable the diagnosis and improved treatment of nervous system diseases such as Alzheimer's disease, multiple sclerosis, schizophrenia, epilepsy and cancers. The present sequence is one of the probes of the
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 WPI;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Penn
                                                                                                                                                                                                                                                                                                                                                    WO200157276-A2
                                                                                                                                                                                                                                                                                                                                                                                                                            microarray;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Human bone marrow expressed
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AAK28719;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     AAK28719
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Sequence
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                                                                                                                                                                         30-JUN-2000;
03-AUG-2000;
                                                                                                                                                                                                               04-FEB-2000;
26-MAY-2000;
                                                                                                                                                                                                                                                                         30-JAN-2001;
                                                                                                                                                                                                                                                                                                              09-AUG-2001
                                                                                                                                                                                                                                                                                                                                                                                                                                                Human;
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1-OCT-2000;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 2001-483446/52
                                        SG,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    201
  2001-488900/53
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                                                                            MOLECULAR DYNAMICS
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2000US-0207456.
2000US-0608408.
2000US-0632366.
2000US-0234687.
2000US-0234685.
2000US-02346359.
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                                                                                                                                                                                                                                                                                                                                                                                                                              cancer;
                                                                                                                2000US-0207456.
2000US-0608408.
2000US-0632366.
2000US-0234687.
2000US-02346359.
2000US-0236359.
                                                                                                                                                                                                                                                                                                                                                                                                                                                marrow expressed exon; gene expression analysis; probe;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       BP;
                                                                                                                                                                                                                                                                         2001WO-US00668
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                                        몼
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       DNA;
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                                                                                                                                                                                                                                                                                                                                                                                                                          leukaemia; lymphoma;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 73.0%;
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                                        Chen
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       454
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Pred. No. 9
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                                        Rank DR;
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RESULT 15
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Example 4;
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                                                                                                                                         WPI;
                                                                                                                                                                                                                                                                                                                                                   cervical
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                                                                                                                                                                                                04-OCT-2000;
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26-MAY-2000;
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                                                                                                                                                                                                                                                                                                                                 Homo sapiens.
                                                                                                                                                                                                                                                                                                                                                             Probe;
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                                                                                                                                                                                                                                                                                                                                                                                                12-OCT-2001
                                                                                                            analyzing
                                                                                                                     Human
                                                                                                                                                            Penn
                                                                                                                                                                                                                   21-SEP-2000;
                                                                                                                                                                              (MOLE-)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              probes of the invention.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             present
                                                                                                                                          2001-488901/53.
                                                                                                                                                            SG,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    201
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                                                                                                                                                                                                                                                                                                                                                                              #3229 for gene expression analysis in
                                                                                                            genome-derived single exon nucleic acid probes useful for zing gene expression in human cervical epithelial cells -
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                                                                                                                                                                                                                                                                                                                                                             human;
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                                                                                                                                                                              MOLECULAR DYNAMICS INC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              454 BP; 135
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                                                                                                                                                                                                                                                                                                                                                   uman; microarray; gene expression; cervical epithelial cell;
cancer; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                      standard;
                                                                                                                                                            Hanzel
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                SEQ ID NO:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               invention
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Conservative
                                                                                                                                                                                                                            2000US-0180312.
2000US-0207456.
2000US-0608408.
2000US-0632366.
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2000US-0236359
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No. 9
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                                                                                                                                                                                                                                                                                                                                                                               human cervical cell sample.
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(SENP). The present sequence is one such probe. The SENPs are derived from human HeLa cells. The SENPs can be used to produce a single exon microarray, which can be used for measuring human gene expression in a sample derived from human cervical epithelial cells. By measuring gene expression, the probes are therefore useful in grading and/or staging of diseases of the cervix, notably cervical cancer.

The present invention relates to human single exon nucleic acid

probes

Note:

The sequence ication, but

data for this patent did not form was obtained in electronic format

part of the printed directly from WIPO

gene

Claim

25;

SEQ ID No 3229; 487pp;

English.

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Title:
Perfect score:
Sequence:
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Maximum Match 100%
Listing first 45 summaries
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   60.:
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   Pred. No. is the number of results predicted by chance to have a
score greater than or equal to the score of the result being printed,
and is derived by analysis of the total score distribution.
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length: 2000000000
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23
1 dcgaagtcgaggctti
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Gapop 10.0 , Gapext 1.0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Issued_Patents_NA.*
1: /cgn2_6/ptodata/1/ina/5A_COMB.seq:*
2: /cgn2_6/ptodata/1/ina/5B_COMB.seq:*
3: /cgn2_6/ptodata/1/ina/6A_COMB.seq:*
4: /cgn2_6/ptodata/1/ina/6B_COMB.seq:*
5: /cgn2_6/ptodata/1/ina/DCTUS_COMB.seq:*
6: /cgn2_6/ptodata/1/ina/Dackfiles1.seq:*
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                                                                    1 US-07-720-587A-1
4 US-09-103-840A-2
4 US-09-103-840A-1
2 US-09-24-591-13
2 US-08-392-338A-22
2 US-09-166-750-22
2 US-09-166-093-22
2 US-09-166-093-22
3 US-09-166-094-22
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3 US-09-166-750-12
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6 US-09-166-750-13
7 US-09-166-094-12
7 US-09-166-094-12
7 US-09-166-094-12
7 US-09-186-094-13
8 US-08-323-445A-3
9 US-08-323-445A-3
9 US-08-515-903A-3
9 US-08-515-903A-3
9 US-08-923-38A-18
US-09-420-592A-3
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      11, Appli
12, Appl
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THE OFFICIATION NOT LINE OF INVENTION OF INVENTION OF INVENTION OF SEQUENCE AD RESSEE: Lyo EET: 611 We EET: 611 WO TYPE: 3 POUTER: 1BM TYPE: 3 POUTER: 1BM TYPE: 3 POUTER: WOTE THE READABLE WOTE 11 LICATION NOT LICATION FOR THE WARDLICATION FOR SERVE CHARACT NOT SERVE CHARACT PROLOGY: 11n PONTS POUTEN NOT SERVE CHARACT POUTEN NOT SERVE CHARACT RANDEDNESS: POLOGY: 11n	C 28 15.8 68.7 1460 3 US-09-166-093-18 C 29 15.8 68.7 1460 3 US-09-172-019-18 C 30 15.8 68.7 1460 3 US-09-166-094-18 C 30 15.8 68.7 1722 1 US-08-055-945-1 C 31 15.6 67.8 2033 1 US-08-148-910-14 C 33 15.6 67.8 2033 1 US-08-148-910-14 C 34 15.6 67.8 2293 4 US-09-645-073-1 C 36 15.4 67.0 9515 1 US-08-920-812-13 C 37 15.4 67.0 9515 1 US-08-920-827-13 C 39 15.4 67.0 9515 1 US-08-362-577C-13 C 39 15.4 67.0 9515 1 US-08-362-577C-13 C 39 15.4 67.0 9515 1 US-08-362-577C-13 C 40 15.4 67.0 9515 1 US-08-362-577C-13 C 40 15.4 67.0 9515 1 US-08-362-577C-13 C 41 15.4 67.0 9515 2 US-08-362-577C-13 C 42 15.4 67.0 4403765 4 US-08-920-878-18 C 42 15.4 67.0 4403765 4 US-08-920-878-18 C 43 15.2 66.1 70.9 4 US-08-998-416-281 45 14.8 64.3 1029 2 US-08-999-011-1 US-07-720-587A-1 US-07-720-587A-1 US-08-999-011-1 US-07-720-587A-1 US-08-599-011-1
on e	Sequence 18, Appl Sequence 18, Appl Sequence 1, Appl Sequence 14, Appl Sequence 14, Appl Sequence 14, Appl Sequence 1, Appl Sequence 1, Appl Sequence 13, Appl Sequence 165, Appl Sequence 1765, App Sequence 17, Appl Sequence 17, Appl Sequence 18, Appl Sequence 17, Appl Sequence 18, Appl Sequence 17, Appl Sequence 18, Appl Sequence 18, Appl Sequence 19,

Query Match 95.7%; Sometime 100.0%; If Matches 22; Conservative 0;

Score 22; DB; Pred. No. 0.000; Mismatches

DB 1; Le.. o. 0.019; 0;

Length 22; 0; Indels

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Gaps

CGAAGTCGAGGCTTTCAGCATG 23

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Best Local Similarity
Matches 19; Conserv
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Query Match
                                                                                                                                                                                                                                                                     FILE REFERENCE: 24366-20007.00
CURRENT APPLICATION NUMBER: US/09/103,840A
CURRENT FILING DATE: 1998-06-24
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   SEQ ID NO 2
                                                                                                                                                                                                                                                            NUMBER OF SEQ ID NOS: 2
                                                                                                                                                                                                                                                                                                        APPLICANT: FRASER, Claire M.
APPLICANT: VENTER, John C.
TITLE OF INVENTION: DNA SEQUENCES FOR STRAIN ANALYSIS IN MYCOBACTERIUM
TITLE OF INVENTION: TUBERCULOSIS
FILE REFERENCE: 24366-20007.00
                                                                                                                                                     ORGANISM: Mycobacterium tuberculosis
OTHER INFORMATION: H37Rv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                APPLICANT: WHITE, Owen R.
APPLICANT: FRASER, Claire M.
APPLICANT: VENTER, JOHN C.
TITLE OF INVENTION: DNA SEQUENCES FOR STRAIN ANALYSIS IN MYCOBACTERIUM TITLE OF INVENTION: TUBERCULOSIS
FILE REFERENCE: 24366-20007.00
CURRENT APPLICATION NUMBER: US/09/103,840A
CURRENT FILING DATE: 1998-06-24
                                                                                                                                                                                            TYPE: DNA
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                                                                                                                                                                                                          LENGTH: 4411529
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                OTHER INFORMATION: CDC 1551
OTHER INFORMATION: "n" bases at various positions throughout the sequence
OTHER INFORMATION: represent a, t, c or g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TYPE: DNA ORGANISM: Mycobacterium tuberculogis
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       SOFTWARE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                   tent No.
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                                                                                                                                                                                                                              ID NO
171880 TCGCTGTCGAGGCTTTCACCATG 171902
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                                                                                                                                                                                                                                                                                                                                                                                                            FLEISCHMAN, Robert D.
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                                                                       Conservative
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                                                                                   75.7%;
82.6%;
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Pred. No. 21
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RESULT 4

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US-08-392-338A-22/c
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Sequence 13, APP--
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Sequence 13, APP---
                                                                                                                                                                            SENERAL INFORMATION:
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NFORMATION FOR SEQ ID NO:
                                                       NUMBER OF SEQUENCES: 2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          GENERAL INFORMATION:
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                                                                             RPPLICANT: Filpula, David
                                                                                                                                   APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           REFERENCE/DOCKET NUMBER: 09
TELECOMMUNICATION INFORMATION:
TELEPHONE: (202) 371-2600
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    SEQUENCE CHARACTERISTICS:
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CURRENT APPLICATION DATA:
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MEDIUM TYPE: Floppy disk
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ATTORNEY/AGENT INFORMATION:
NAME: Goldstein, Jorge F
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                               STREET:
                                           ADDRESSEE:
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                                                                                                                                                                                                                                                                                                                                                                                                                                 NAME/KEY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                              TOPOLOGY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       LENGTH: 738 base pairs
TYPE: nucleic acid
STRANDEDNESS: both
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  APPLICATION NUMBER: US 0
FILING DATE: 20-NOV-1992
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FILING DATE: 15-JAN-1993
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                                                                                                                                                                                                                                                                             350 GAAGTAGAGCCTTTCAGCA 332
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17; Conserv
Washington D.C.
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                          1100 New York Avenue,
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                                                                                                                                Wood, James F
Hardman, Karl
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                                                                                                                  Bird, Robert
                                                                                                                                                                                                                                                                                                                                        Conservative
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                          Sterne, Kessler, Goldstein & 00 New York Avenue, NW
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Pred. No. 4
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                                     Fox P.L.L.C
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Best Local
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PRIOR APPLICATION DATA:
APPLICATION UNMBER: US 07/989,846
FILING DATE: 20-NOV-1992
PRIOR APPLICATION DATA:
APPLICATION UNMBER: US 07/796,936
FILING DATE: 25-NOV-1991
ATTORNEY/ACENT INFORMATION:
NAME: GOIGSTAIN TOTGE A
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    INFORMATION FOR SEQ ID NO:
                                                                                                                                                                                                                                                                                                                                                                                                                  GENERAL INFORMATION:
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MEDIUM TYPE: Floppy disk
                                                                                                                                                                                                                                                                                                                                                                                                                             tent No. 59902
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TELECOMMUNICATION INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  SEQUENCE CHARACTERISTICS:
LENGTH: 738 base pairs
                                                                                                                   COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                   APPLICANT: Whitlow, Marc
APPLICANT: Filpula, David
TITLE OF INVENTION: Linker For Linked Fusion Polypeptides
NUMBER OF SEQUENCES: 25
CORRESPONDENCE ADDRESS:
CORRESPONDENCE ADDRESS:
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                                PRIOR APPLICATION DATA:
APPLICATION NUMBER:
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OPERATING SYSTEM: PC-DOS/MS-DOS
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STRANDEDNESS: both
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                                                                                                                                                                                                                                          COUNTRY:
                                                                                                                                                                                                                                                                           CITY: Washington
                                                                                  APPLICATION NUMBER: FILING DATE:
                                                                     CLASSIFICATION:
                                                                                                                                                                                                                                                                                                           ADDRESSEE:
APPLICATION NUMBER: .US 08/002,845
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350 GAAGTAGAGCCTTTCAGCA 332
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                                                                                                  us/08/926,789
                                  08/224,591
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; LOCATION:
US-08-926-789-13
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Matches 17
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TELECOMMUNICATION INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             FILING DATE: 20-NOV-1992
ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 07/980,529
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                           COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM FC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release $1.0, Version $1.25
CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                   APPLICANT: Rollence, Michelle TITLE OF INVENTION: Methods for Producing Multivalent Antigen-Binding TITLE OF INVENTION: Proteins
                                                                 PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 07/989,846
FILING DATE: 20-NOV-1992
                                                                                                                PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08
FILING DATE: 22-FEB-1995
                                                                                                                                                                                                                                                                                                                                                                                                     CORRESPONDENCE ADDRESS:
                                                  PRIOR APPLICATION DATA:
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ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              FILING DATE: 15-JAN-1993
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TOPOLOGY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TYPE: nucleic acid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TELEFAX:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   REGISTRATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      STRANDEDNESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TELEPHONE:
                                                                                                                                                                              APPLICATION NUMBER: FILING DATE: Herew
                                                                                                                                                                                                                                                                                                                                                      STREET: 1100 New CITY: Washington
                                                                                                                                                               CLASSIFICATION:
                                                                                                                                                                                                                                                                                                                        COUNTRY:
                                   APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                        ADDRESSEE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             350 GAAGTAGAGCCTTTCAGCA 332
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17; Conserv
                                                                                                                                                                                                                                                                                                                                         D.C.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Application US/09166750
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    (202)
                                                                                                                                                                                                                                                                                                                                                                         E: Sterne, Kessler, Gold
1100 New York Avenue, NW
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Hardman, Karl
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      join(1..726)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Wood, James F.
                                                                                                                                                                                                                                                                                                                        U.S.A.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       both
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Filpula, David
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  (202) 371-2600
202) 371-2540
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        both
                                                                                                                                                                              Herewith
                       25-NOV-1991
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Robert
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Jorge
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          68.7%;
                                                                                                                                                                                                                                                                                                                                                                                        Kessler, Goldstein & Fox P.L.L.C.
                                    US 07/796,936
                                                                                                                                 US 08/392,338
                                                                                                                                                                                                 US/09/166,750
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Pred. No. 4
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Query Match
                                       REFERENCE/DOCKET NUMBER: 09
TELECOMMUNICATION INFORMATION:
TELEPHONE: (202) 371-2600
                                                                                                                                                       APPLICATION NUMBER: US 08/392,338
FILING DATE: 22-FEB-1995
PRIOR APPLICATION UNMBER: US 07/989,846
FILING DATE: 20-NOV-1992
PRIOR APPLICATION DATA:
                                                                                                              APPLICATION NUMBER: US 07 FILING DATE: 25-NOV-1991 ATTORNEY/AGENT INFORMATION:
SEQUENCE CHARACTERISTICS
                                                                                                                                                                                                                                                 PRIOR APPLICATION DATA:
                                                                                                                                                                                                                                                                                                        SOFTWARE: Patentin Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                      MEDIUM TYPE: Floppy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               NFORMATION FOR SEQ ID NO:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        NUMBER OF SEQUENCES: 2
CORRESPONDENCE ADDRESS:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ITLE OF INVENTION:
                                                               TORNEY/AGGA: AND TOTGE A.

REGISTRATION NUMBER: 29,021

REGISTRATION NUMBER: 0977.003000B
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   PPLICANT:
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                                                                                                                                                                                                                                                                                                                                         MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
                                                                                                                                                                                                                                                                                  APPLICATION NUMBER: FILING DATE: Herew
                                                                                                                                                                                                                                                                      CLASSIFICATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                  CITY: Washington STATE: D.C.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ADDRESSEE:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TYPE: nucleic acid
STRANDEDNESS: both
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 LOCATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      REFERENCE/DOCKET NUMBER: 0977.003000C
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5. 6027725
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                                                                                                                                                                                                                                                                                                                                                                                                         20005
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Similarity 89.5%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                            E: Sterne, Kessler, Goldstein & Fox P.L.L.C.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Filpula, David
Rollence, Michelle
VENTION: Miltivalent Antigen-Binding Proteins
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                738 base pairs
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1..726
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                                                                                                                                             US 07/796,936
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Pred. No. 4
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US-09-172-019-22
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; LOCATION:
US-09-166-093-22
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 Query Match
Best Local Similarity
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Query Match
Best Local :
                                                                                                                                                                                                                                                                                                   CLASSIFICATION:
PRIOR APPLICATION UNMBER: US 08/
APPLICATION NUMBER: US 08/
FILING DATE: 22-FEB-1995
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 07/
FILING DATE: 20-NOV-1992
PRIOR APPLICATION UNMBER: US 07/
APPLICATION NUMBER: US 07/
                                                                                                                                                                       TELEFAX: (202) 371-25.
INFORMATION FOR SEQ ID NO:
                                                                                                                                                                                                REFERENCE/DOCKET NUMBER: 09
TELECOMMUNICATION INFORMATION:
TELEPHONE: (202) 371-2600
                                                                                                                                                                                                                                            ATTORNEY/AGENT INFORMATION:
NAME: Goldstein, Jorge A
REGISTRATION NUMBER: 29,
                                                                                        FEATURE:
                                                                                                                                                             SEQUENCE CHARACTERISTICS:
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CURRENT APPLICATION DATA
APPLICATION NUMBER: U
FILING DATE: Herewith
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MEDIUM TYPE: Floppy disk
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      CORRESPONDENCE ADDRESS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TITLE OF INVENTION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       NUMBER OF SEQUENCES:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     FEATURE
                                                                                                    TOPOLOGY:
                                                                                                                TYPE: nucleic acid
STRANDEDNESS: both
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        COMPUTER: IBM PC
OPERATING SYSTEM:
                                                                         NAME/KEY:
                                                                                                                                                                                                                                                                                          FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          STREET: 1100 New CITY: Washington
                                                           OCATION:
                                                                                                                                             ENGTH:
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ZIP: 20005
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nes 17; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TOPOLOGY: both
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       350 GAAGTAGAGCCTTTCAGCA 332
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 D.C.
                                                                                                                                            738 base pairs
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       E: Sterne, Kessler, Goldstein & Fox P.L.L.C
1100 New York Avenue, NW
                                                                                                    both
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Hardman,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CDS
1..726
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       IBM PC compatible
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                                                                                                                                                                                                                                          Jorge A.
ER: 29,021
 68.7%;
89.5%;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          PC-DOS/MS-DOS
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Score 15.8; DB Pred. No. 44;
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Pred. No. 4
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          Length 738;
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B 8

350 GAAGTAGAGCCTTTCAGCA 332

3 GAAGTCGAGGCTTTCAGCA 21 `

Matches

17;

Conservative

0; Mismatches

2:

Indels

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PCT-US93-11138-13/c

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US-09-166-094-22/c
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                                                                                                                     US-09-166-094-22
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                                                           Matches
                                                                                      Query Match
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                                                                                                                                                                                                                                                                                                                                                                                                     PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/392,338
FILING DATE: 22-FEB-1995
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 07/989,846
FILING DATE: 20-NOV-1992
PRIOR APPLICATION DATA:
                                                                                                                                                                                                                                                        INFORMATION FOR SEQ ID NO:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                COMPUTER READABLE FORM: MEDIUM TYPE: Floppy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     CORRESPONDENCE ADDRESS
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                                                                                                                                                                                                                        SEQUENCE CHARACTERISTICS:
LENGTH: 738 base pairs
                                                                                                                                                                                                                                                                                                TELECOMMUNICATION INFORMATION:
                                                                                                                                                                                                                                                                                                                                                         FILING DATE: 25-NOV-1991
ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         APPLICATION NUMBER: FILING DATE: Herew
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    SOFTWARE:
                                                                                                                                  NAME/KEY:
LOCATION:
                                                                                                                                                                                                                                                                                                                             NAME: Goldstein, Jorge A. REGISTRATION NUMBER: 29,0
                                                                         Local
                                                                                                                                                                              TOPOLOGY:
                                                                                                                                                                                              STRANDEDNESS:
                                                                                                                                                                                                                                                                                  TELEPHONE:
                                                                                                                                                                                                                                                                                                                REFERENCE/DOCKET NUMBER: 0977.003000A
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 350
                                                          Similarity
17; Conserv
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  20005
                                                                                                                                                                                              nucleic acid
EDNESS: both
                 GAAGTCGAGGCTTTCAGCA 21
   GAAGTAGAGCCTTTCAGCA 332
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Rollence, Michelle
VENTION: Multivalent Antigen-Binding Proteins
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             U.S.A.
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                                                                                                                                                                                                                                                                       (202)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     PatentIn Release #1.0, Version #1.25
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                                                           Conservative
                                                                                                                                  CDS
1..726
                                                                                                                                                                              both
                                                                                                                                                                                                                                                                                    (202) 371-2600
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Herewith
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                                                                                                                                                                                                                                                                      371-2540
                                                                         68.7%;
                                                                                                                                                                                                                                                                                                                                                                                          US 07/796,936
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         US/09/166,094
                                                           0:
                                                                         Score 15.8;
Pred. No. 4
                                                             Mismatches
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                                                                                       Length 738;
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                                                             Gaps
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RESULT 11

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US-08-392-338A-12/c
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Best Local (
                                                                                                                                                                                                                                                                                                                                                     Matches
                                                                                                                                                                                                                    sequence
                                                                                                                                                                                                      Patent No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TELEFAX: (202) 371-25
                                                                                                                                                                                        GENERAL INFORMATION:
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MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 0
FILING DATE: 15-JAN-1993
ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TITLE OF INVENTION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TELECOMMUNICATION INFORMATION: TELEPHONE: (202) 371-2600
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             SOFTWARE: PatentIn Rel
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APPLICANT:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                         FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              SEQUENCE CHARACTERISTICS:
                                                                        CORRESPONDENCE ADDRESS
                                                                                      NUMBER OF SEQUENCES:
                                                                                                                   APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                          NAME/KEY:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 APPLICATION NUMBER:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             CITY: Washington
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TOPOLOGY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      REGISTRATION NUMBER: 29,021
REFERENCE/DOCKET NUMBER: 0977.2006604/JAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 NAME: Goldstein, Jorge A. REGISTRATION NUMBER: 29,0
                                                                                                                                                                                                                                                                                                                                                   Local Similarity
les 17; Conserv
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                                           STREET:
                                                        ADDRESSEE:
                                                                                                                                                                                                                                                                                          350 GAAGTAGAGCCTTTCAGCA 332
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20005-3934
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D.C.
Y: U.S.A.
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                                           E: Sterne, Kessler, G
1100 New York Avenue,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  738 base pairs
                                                                                                                                                                                                                                                                                                                                                   Conservative
                                                                                                           Filpula, David
                                                                                                                              Hardman, Karl
Bird, Robert
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                                                                                                  Multivalent Antigen-Binding Proteins
                                                                                                                                                                                                                                                                                                                                                                   68.7%;
89.5%;
                                           Kessler, Goldstein & Fox P.L.L.C. ork Avenue, NW
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US-09-166-750-12/c
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                    COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.25
CURRENT APPLICATION NUMBER: US/09/166,750
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TELEFAX: (202) 371-25
INFORMATION FOR SEQ ID NO:
                                                                                                                                                                                                                                                                                     APPLICANT:
                                                                                                                                                                                                                          CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                         NUMBER OF SEQUENCES:
                                                                                                                                                                                                                                                         TITLE OF INVENTION:
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CLASSIFICATION: 435
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 07/989,846
FILING DATE: 20-NOV-1992
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TELECOMMUNICATION INFORMATION:
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CURRENT APPLICATION DATA:
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                                                                                                                                                             CITY: Washington STATE: D.C.
CLASSIFICATION:
                                                                                                                                     ZIP: 20005
                                                                                                                                                                                                               ADDRESSEE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Local Similarity 89.5 es 17; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   NAME/KEY: CDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TYPE: nucleic acid
STRANDEDNESS: both
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TELEPHONE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              REGISTRATION NUMBER: 29,021
REFERENCE/DOCKET NUMBER: 0977.0030007
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OPERATING SYSTEM: PC-DOS/MS-DOS
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Goldstein, Jorge A.
                                                                                                                                                                                         E: Sterne, Kessler, Go
1100 New York Avenue,
                                                                                                                                                                                                                                                                                Filpula, David
Rollence, Michelle
                                                                                                                                                                                                                                                                                                               Hardman, Karl
Bird, Robert
                                                                                                                                                                                                                                                                                                                                                             Whitlow, Marc
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              Herewith
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        68.7%;
                                                                                                                                                                                                                                                            Methods for Producing Multivalent Antigen-Binding
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   371-2600
                                                                                                                                                                                            Kessler, Goldstein & Fox P.L.L.C
ork Avenue, NW
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Pred. No. 4
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RESULT 14
US-09-166-093-12/c
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; LOCATION:
US-09-166-750-12
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Best Local
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Matches
                                                                                                                                                                MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
                             PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/392,338
FILING DATE: 22-FEB-1995
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 07/989,846
FILING DATE: 20-NOV-1992
                                                                                                                                                                                                                          COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy (
COMPUTER: IBM PC com)
                                                                                                                                                                                                                                                                                                                                                          APPLICANT: Filpula, David
APPLICANT: Rollence, Michelle
TITLE OF INVENTION: Multivalent Antigen-Binding Proteins
NUMBER OF SEQUENCES: 23
CORRESPONDENCE ADDRESS:
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NFORMATION FOR SEQ ID NO:
                                                                                                                                                                                                                                                                                                ADDRESSEE: Sterne
STREET: 1100 New \
CITY: Washington
STATE: D.C.
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                                                                                                                                            APPLICATION NUMBER: FILING DATE: Herew
                                                                                                                               CLASSIFICATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               PRIOR APPLICATION DATA:
                                                                                                                                                                                                                                                                          ZIP: 20005
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Application US/09166093
                                                                                                                                                                                                                                                                                                                                 E: Sterne, Kessler, Goldstein & Fox P.L.L.C.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                            Wood, James F
Hardman, Karl
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                                                                                                                                              Herewith
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US 07/796,936
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Pred. No. 4
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; LOCATION:
US-09-166-093-12
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US-09-172-019-12/c
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                       PRIOR APPLICATION DATA:

APPLICATION NUMBER: US 08/392,338

FILING DATE: 22-FEB-1995

PRIOR APPLICATION NUMBER: US 07/989,846

APPLICATION NUMBER: US 07/989,846

APPLICATION NUMBER: US 07/796,936

PRIOR APPLICATION NUMBER: US 07/796,936

APPLICATION NUMBER: US 07/796,936

PRIOR APPLICATION NUMBER: US 07/796,936

APPLICATION NUMBER: US 07/796,936

APPLICATION NUMBER: US 09/796,936

PRICERENCE/DOCKET NUMBER: 09/7003000D

REFERENCE/DOCKET NUMBER: 09/7003000D

TELECOMMUNICATION INFORMATION:

TELECHONE: (202) 371-2640

TELECHANE: (202) 371-2640
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SEQUENCE CHARACTERISTICS:
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TELECOMMUNICATION INFORMATION:
TELEPHONE: (202) 371-2600
                                                                                                                                                                                                                                                                                                                                                                              COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            APPLICANT:
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ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                           CURRENT APPLICATION DATA:
APPLICATION NUMBER: US
FILING DATE: Herewith
CLASSIFICATION:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ITITLE OF INVENTION: Nucleic Acid Molecules Encoding Single-Chain
ITITLE OF INVENTION: Antigen-Binding Proteins (As Amended)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          NUMBER OF SEQUENCES:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         REGISTRATION NUMBER:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      LENGTH: 744 base pairs
TYPE: nucleic acid
STRANDEDNESS: both
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Local
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                CITY: Washington
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ADDRESSEE:
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||||| ||| |||||||||
350 GAAGTAGAGCCTTTCAGCA 332
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     INFORMATION:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 E: Sterne, Kessler, Goldstein & Fox P.L.L.C
1100 New York Avenue, NW
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           U.S.A.
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1..732
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Whitlow, Marc
Hardman, Karl
                                                                                                                                                                                                                                                                                                                                                                                  Patentin Release #1.0, Version #1.25
(202) 371-2600
(202) 371-2540
R SEQ ID NO: 12:
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Pred. No. 44;
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; NAME/KEY:
; LOCATION:
US-09-172-019-12
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                                                    Query Match
Best Local S
                                           Matches
                                                                                                                TYPE: nucleic acid
STRANDEDNESS: both
TOPOLOGY: both
TEATURE:
                                                                                                                                                          SEQUENCE CHARACTERISTICS:
LENGTH: 744 base pairs
3 GAAGTCGAGGCTTTCAGCA 21
||||| ||| |||||||||
350 GAAGTAGAGCCTTTCAGCA 332
                                          l Similarity
17; Conserv
                                           Conservative
                                                                                              CDS
1..732
                                                     68.7%;
                                          Score 15.8; D
Pred. No. 44;
0; Mismatches
                                           0
                                                                DB 3;
                                                                Length 744;
                                             Indels
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Gaps

0

Search completed: June 12, 2003, 04:38:51 Job time : 55.066 secs

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GenCore version 5.1.6 Copyright (c) 1993 - 2003 Compugen Ltd.

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Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries
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Maximum DB seq length: 2000000000
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Gapop 10.0 , Gapext 1.0
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23
1 dcgaagtcgaggctttcagcatg 23
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                                                                                                                                                            /cgn2_6/ptodata/2/pubpna/PCTUS_PUBCOMB.seq:*
/cgn2_6/ptodata/2/pubpna/US08_NEW_PUB.seq:*
/cgn2_6/ptodata/2/pubpna/US08_PUBCOMB.seq:*
                                                                                                                                                                                                                                           /cgn2_6/ptodata/2/pubpna/US06_NEW_PUB.seq:*
/cgn2_6/ptodata/2/pubpna/US06_PUBCOMB.seq:*
/cgn2_6/ptodata/2/pubpna/US07_NEW_PUB.seq:*
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/cgn2_6/ptodata/2/pubpna/PCT_N
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                         /cgn2_6/ptodata/2/pubpna/US09_PUBCOMB.seq:*
/cgn2_6/ptodata/2/pubpna/US10_NEW_PUB.seq:*
/cgn2_6/ptodata/2/pubpna/US10_NEW_PUB.seq:*
/cgn2_6/ptodata/2/pubpna/US60_NEW_PUB.seq:*
/cgn2_6/ptodata/2/pubpna/US60_PUBCOMB.seq:*
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239.539 Million cell updates/sec
                                                                                                                                        _NEW_PUB.seq:*
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Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

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68.7 68.7 68.7	68.7 68.7 68.7	68.7 68.7 68.7 68.7 68.7	73.0 71.3 71.3 68.7 68.7	% Query Match Length
818 818 933	782 782 782 782	397 550 723 723 758	454 891 1097 310 375	Length 1691139
9 10	10 10 9	90 10 10 10	1000	. DB
US-09-985-442-3 US-09-983-580-3 US-09-938-842A-536	US-09-985-442-1 US-09-791-578-3 US-09-791-540-3 US-09-983-580-1	US-09-867-701-8410 US-09-991-936-838 US-09-791-578-5 US-09-791-540-5 US-09-956-086-1 US-09-956-087-1	US-09-989-643-155 US-09-989-643-155 US-09-974-300-179 US-09-878-574-665 US-09-878-574-3603	ID US-10-067-514-1
Sequence 3, Appli Sequence 3, Appli Sequence 536, App	Sequence 1, Appli Sequence 3, Appli Sequence 3, Appli Sequence 1, Appli	Sequence 8410, Ap Sequence 838, Appl Sequence 5, Appli Sequence 5, Appli Sequence 1, Appli Sequence 1, Appli	Sequence 125, App Sequence 179, App Sequence 665, App Sequence 3603, App	Description

44		c 43								34	33	32	31	30	29			c 26				22	21	c 20
15.2	15	15	15	15	15	15	15	15	15	15.2	15	15	15										15.8	15.8
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9 US-10-073-961-602 10 US-09-764-887-602	10 US-09-764-860-867	9 US-10-074-095-867	10 US-09-764-860-868	9 US-10-074-095-868	9 US-09-832-292-28	10 US-09-925-299-98	9 US-09-925-299-98	10 US-09-815-242-7828	9 US-10-164-433-1	10 US-09-910-943-408	10 US-09-783-590-10265	10 US-09-795-686-1	_	9 US-09-946-807-1	9 US-10-199-550-1	10 US-09-867-701-10873	10 US-09-822-849A-139	9 US-09-894-844-25	10 US-09-880-107-3945	10 US-09-880-107-1612		9 US-09-952-213D-6	9 US-10-165-603-19	10 US-09-770-445-271
Sequence 602, App Sequence 602, App		Sequence 867, App	Sequence 868, App	Sequence 868, App	Sequence 28, Appl	Sequence 98, Appl	Sequence 98, Appl	Sequence 7828, Ap	Sequence 1, Appli	Sequence 408, App	Sequence 10265, A	Sequence 1, Appli	Sequence 1, Appli	Sequence 1, Appli	Sequence 1, Appli	Sequence 10873, A	Sequence 139, App	Sequence 25, Appl	Sequence 3945, Ap	Sequence 1612, Ap	Sequence 552, App	Sequence 6, Appli	Sequence 19, Appl	Sequence 271, App

ALIGNMENTS

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; LENGTH: 1691139
; TYPE: DNA
; ORGANISM: Human
US-10-067-514-1
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US-10-067-514-1
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                                                                                                                                                                                     US-09-864-761-3226/c
                                    GENERAL INFORMATION:
APPLICANT: Penn, Sharron G.
APPLICANT: Rank, David R.
APPLICANT: Hanzel, David K.
APPLICANT: Chen, Wensheng
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  SOFTWARE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Sequence 1, Application US/10067514 Publication No. US20030054531A1
                                                                                                                                                                                                                                                                                                                                                Query Match 74.8%;
Best Local Similarity 86.4%;
Matches 19; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    GENERAL INFORMATION:
                                                                                                                                          Sequence 3226, Application US/09864761 Patent No. US20020048763A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               CURRENT APPLICATION NUMBER: US/10/067,514
CURRENT FILING DATE: 2002-02-04
PRIOR APPLICATION NUMBER: US 09/811/352
PRIOR FILING DATE: 2001-03-19
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        APPLICANT: Reynisdottir, Sigridur Th. TITLE OF INVENTION: HUMAN STROKE GENE FILE REFERENCE: 235.2010-003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         APPLICANT: Gretarsdottir, Solveig APPLICANT: Jonsdottir, Sif
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             NUMBER OF SEQ ID NOS:
TITLE OF INVENTION: HUMAN GENOME-DERIVED SINGLE EXON NUCLEIC ACID PROBES USEFUL FO TITLE OF INVENTION: GENE EXPRESSION ANALYSIS BY MICROARRAY
                                                                                                                                                                                                                                                                     758783 CGAAGTGTATGCTTTCAGCATG 758804
                                                                                                                                                                                                                                                                                          2 CGAAGTCGAGGCTTTCAGCATG 23
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        FastSEQ
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                                                                                                                                                                                                                                                                                                                                                     0;
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Pred. No. 3
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RESULT 3
US-09-989-643-155/c
; Sequence 155, Application US/09989643
; Publication No. US20030049636A1
; GENERAL INFORMATION:
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CURRENT FILING DATE: 2001-05-23
PRIOR APPLICATION NUMBER: US 60/180,312
PRIOR FILING DATE: 2000-02-04
PRIOR APPLICATION NUMBER: US 60/207,456
PRIOR APPLICATION NUMBER: US 09/632,366
PRIOR APPLICATION NUMBER: US 09/632,366
PRIOR APPLICATION NUMBER: GB 24263.6
PRIOR APPLICATION NUMBER: US 60/236,359
PRIOR APPLICATION NUMBER: US 60/236,359
PRIOR APPLICATION NUMBER: PCT/US01/00666
PRIOR APPLICATION NUMBER: PCT/US01/00667
                                                                                                                                                                                                                                                                         Query Match
Best Local Similarity
                                                                                                                                                                                                                                                           Matches
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SOFTWARE: Annomax Sequence |
SEQ ID NO 3226
LENGTH: 454
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               FEATURE:

OTHER INFORMATION: I
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TYPE: DNA
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    APPLICATION NUMBER: US 09/608,408
FILING DATE: 2000-06-30
APPLICATION NUMBER: US 09/774,203
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     FILING DATE: 2001-01-30
APPLICATION NUMBER: PCT/US01/00662
FILING DATE: 2001-01-30
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      FILING DATE: 2001-01-30
APPLICATION NUMBER: PCT/US01/00670
FILING DATE: 2001-01-30
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    APPLICATION NUMBER: PCT/US01/0066: FILING DATE: 2001-01-30
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   APPLICATION NUMBER: PCT/US01/00668 FILING DATE: 2001-01-30
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        APPLICATION NUMBER: PCT/US01/00665
FILING DATE: 2001-01-30
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APPLICATION NUMBER: PCT/US01/00664
FILING DATE: 2001-01-30
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                                                                                                                                                                                                                                                                                                                                                                                           INFORMATION:
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                                                                                                                                                              AAGTAGAGGCTTTCTGCATG 182
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EXPRESSED IN ADULT
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                                                                                                                                                                                                                                                                         73.0%;
                                                                                                                                                                                                                                                                                                                                                          ED IN ADULT LIVER, SIGNAL = 0.99
ED IN BRAIN, SIGNAL = 1.5
ED IN PLACENTA, SIGNAL = 1.2
ED IN HEART, SIGNAL = 1.2
ED IN HELA, SIGNAL = 1.2
ED IN HELA, SIGNAL = 1.3
ED IN LUNG, SIGNAL = 1.3
ED IN HOLD, SIGNAL = 1.3
ED IN HOLD, SIGNAL = 0.98
ED IN BOLE MARROW, SIGNAL = 1.3
ED IN FETAL LIVER, SIGNAL = 1.4
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Pred. No. 33;
0; Mismatches
                                                                                                                                                                                                                                                      0
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PRIOR APPLICATION NUMBER: 60/279,526
PRIOR FILING DATE: 2001-03-27
NUMBER OF SEQ ID NOS: 8481
SOFTWARE: FASTSEQ for Windows Version 4.
SEQ ID NO 179
LENGTH: 1097
TYPE: DNA
ORGANISM: Bacillus licheniformis
US-09-974-300-179
                                                                                                             RESULT 5
US-09-878-574-665
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US-09-974-300-179
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                                                     Sequence 665, Application US/09878574
Patent No. US20020110548A1
GEMERAL INFORMATION:
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Best Local S
Matches 18
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Patent No.
APPLICANT: Byrum, Joseph R. APPLICANT: La Rosa, Thomas APPLICANT: Thompson, Micha
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Sequence
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CURRENT APPLICATION NUMBER: US/09/989,643

CURRENT FILING DATE: 2001-11-20

PRIOR APPLICATION NUMBER: EARLIER APPLICATION NUMBER: 09/297,539

PRIOR FILING DATE: EARLIER FILING DATE: 1999-05-09

PRIOR FILING DATE: EARLIER FILING DATE: 1996-11-04

NUMBER OF SEQ ID NOS: 174

SOFTWARE: Patentin Ver. 2.1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Matches
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CURRENT FILING DATE: 2001-10-05
PRIOR APPLICATION NUMBER: 09/680,598
PRIOR FILING DATE: 2000-10-06
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               APPLICANT: Clausen, Ib Groth
TITLE OF INVENTION: Methods For Monitoring
TITLE OF INVENTION: Expression
FILE REFERENCE: 10085.500-US
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            APPLICANT: Roy, Paul H.
TITLE OF INVENTION: Specias - Specific, Genus-Specific and Universal DNA
TITLE OF INVENTION: Probes and Amplification Primers to Rapidly Detect
TITLE OF INVENTION: Identify Common Bacterial and Fungal Pathogens and
TITLE OF INVENTION: Associated Antibiotic Resistance Genes from
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              APPLICANT: Berka, Randy M.
APPLICANT: Clausen, Ib Gr
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             LENGTH: 891
TYPE: DNA
ORGANISM: Fibrobacter succinogenes
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             APPLICANT: Bergeron, Michel
APPLICANT: Picard, Francis
APPLICANT: Ouellette, Marc
                                                                                                                                                                                  179 ACGAGGTCGAGAATTTCAGCAT 158
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18; Conserv
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18; Conser
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La Rosa, Thomas J. Thompson, Michael
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20020146721A1
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Roy, Paul H.
                                                                                                                                                                                                                                                           71.3%;
ilarity 81.8%;
Conservative
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                                                                                                                                                                                                                                                                         Score 16.4;
Pred. No. 58;
                                                                                                                                                                                                                                                          Mismatches
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APPLICANT: Jones, Robert
APPLICANT: Harlocker, Susan L.
APPLICANT: Harlocker, Susan L.
TITLE OF INVENTION: COMPOSITIONS AND METHODS FOR
TITLE OF INVENTION: AND DIAGNOSIS OF OVARIAN C.I
FILE REFRENCE: 210121.497
CURRENT APPLICATION NUMBER: US/09/867,701
CURRENT FILING DATE: 2001-05-29
NUMBER OF SEQ ID NOS: 10912
SOFTMARE: FastSEQ for Windows Version 4.0
SEQ ID NO 8410
LENGTH: 397
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ORGANISM: Glycine max
OTHER INFORMATION: Clone ID: LIB3028-008-Q1-B1-D10
US-09-878-574-3603
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US-09-878-574-3603/c
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APPLICANT: La Rosa, Thomas J.
APPLICANT: The Mongeon, Michael D.
TITLE OF INVENTION: Nucleic acid Molecules an
TITLE OF INVENTION: Plants
FILE REFERENCE: 38-21 (15401) B
FULE REFERENCE: 38-21 (15401) B
CURRENT APPLICATION NUMBER: US/09/878,574
CURRENT FILING DATE: 2001-12-21
PRIOR APPLICATION NUMBER: 09/333,535
PRIOR FILING DATE: 1999-06-14
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SEQ ID NO 665
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                                                                                                                                                                                                                                                        Sequence 8410, Application US/09867701 Patent No. US20020132237A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              NUMBER OF SEQ ID NOS: 15775
SEQ ID NO 3603
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Best Local Similarity
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PRIOR FILING DATE: 1999-06-14
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TITLE OF INVENTION: Nucleic Acid Molecules TITLE OF INVENTION: Plants
                                                                                                                                                                                                                  APPLICANT: Aglate, Paul A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TYPE: DNA
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78.3%;
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1; Mismatches
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Pred. No. 1.1e+02;
1; Mismatches 4
                                                                                                                                           ND METHODS FOR THE THERAPY OF OVARIAN CANCER
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CURRENT FILING DATE: 2001-11-21
FRIOR APPLICATION NUMBER: US/09/543,668
PRIOR FILING DATE: 2000-04-07
PRIOR APPLICATION NUMBER: 60/128,704
PRIOR APPLICATION NUMBER: 60/128,704
PRIOR FILING DATE: 1999-04-09
NUMBER OF SEQ ID NOS: 1959
SOFTWARE: Patentin Ver. 2.1
SEQ ID NO 838
LENGTH: 550
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ; TYPE: DNA
; ORGANISM: Ctenocephalides felis
US-09-991-936-838
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US-09-791-578-5/c
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Best Local Similarity
Matches 17; Conserv
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Best Local :
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Publication No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Matches
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    APPLICANT: Gaines, Patrick J.
APPLICANT: Stinchcomb, Dan T.
APPLICANT: Wisnewski, Nancy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          APPLICANT: Brandt, Kevin S. APPLICANT: Gaines, Patrick
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TYPE: DNA
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                            COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0,
                                                                                                                                         CORRESPONDENCE ADDRESS:
ADDRESSEE: STERNE, KESSLER, GOLDSTEIN & FOX P.L.L.C.
STREET: 1100 NEW YORK AVENUE, SUITE 600
CITY: WASHINGTON
STATE: DC
COUNTRY: USA
                                                                                                                                                                                                                                                                                TITLE OF INVENTION: POLYALKYLENE OXIDE-MODIFIED SINGLE CHAIN POLYPEPTIDES
            CURRENT
                                                                                                                                                                                                                                                              NUMBER OF SEQUENCES:
                                                                                                                                                                                                                                                                                                                                                           APPLICANT: WHITLOW, MARC SHORR, ROBERT G.L.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        282 TCAAAGTAGTGGCTTTCTGCATG 304
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D. US20030073827A1
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89.5%;
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78.3%;
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Pred. No. 1
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Pred. No. 1.
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                                Version #1.30
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RESULT 10
US-09-791-540-5/c
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FILING DATE: 02-DEC-1997
ATTORNEY/AGENT INFORMATION:
NAME: JORGE A. GOLDSTEIN
REGISTRATION NUMBER: 29,021
REFERENCE/DOCKET NUMBER: 0977.1840002
TELECOMMUNICATION INFORMATION:
TELEPHONE: 202-371-2600
TELEPHONE: 202-371-2640
INFORMATION FOR SEQ ID NO: 5:
SEQUENCE CHARACTERISTICS:
LENGTH: 723 DASE PAIRS
TYPE: nucleic acid
STRANDEDNESS: both
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Sequence 5, Application US/09791540
Patent No. US20020098192A1
GENERAL INFORMATION:
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Matches 17; Conserv
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 09/069,842
FILING DATE: 1998-04-30
APPLICATION NUMBER: US 60/050,472
FILING DATE: 23-JUN-1997
                                                                                                 CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/09/791,540
FILING DATE: 26-Feb-2001
CLASSIFICATION: UDknown>
                                                                                                                                                                             COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: THE PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.30
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 NAME/KEY: CDS
LOCATION: 1..723
SEQUENCE DESCRIPTION: SEQ ID NO: 5:
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                                                                                                                                                                                                                                                                                                                                                                                                                                    NUMBER OF SEQUENCES:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TITLE OF INVENTION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        APPLICANT: WHITLOW, MARC
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STREET: 1100 NEW YORK AVENUE,
CITY: WASHINGTON
STATE: DC
                                                                                                                                                                                                                                                                                        COUNTRY: USA
ZIP: 20005
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FILING DATE: <Unknown>
APPLICATION NUMBER: US 60/050,472
FILING DATE: 23-0UN-1997
APPLICATION NUMBER: US 60/063,074
FILING DATE: 27-0CT-1997
APPLICATION NUMBER: US 60/063,074
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  CLASSIFICATION: <Unknown>
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   SHORR, ROBERT G.L.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       68.7%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                       POLYALKYLENE OXIDE-MODIFIED SINGLE CHAIN POLYPEPTIDES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              DAVID R.
                                                                                                                                                                                                                                                                                                                                                                    KESSLER, GOLDSTEIN & FOX P.L.L.C.
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Pred. No. 1
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US-09-956-086-1/c
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Sequence 1, Application US/09956086 Patent No. US20020155498A1 GENERAL INFORMATION:
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                                                PRIOR APPLICATION DATA:

APPLICATION NUMBER: 09/069,821

FILING DATE: <Unknown>

APPLICATION NUMBER: US 60/063,074

FILING DATE: 27-CCT-1997

APPLICATION NUMBER: US 60/050,472

FILING DATE: 23-UN-1997

FILING DATE: 23-UN-1997
                                                                                                                                                                              COMPUTER: IBM PC compatible
operating system: pc-Dos/MS-Dos
SOFTWARE: Patentin Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
APPLICATION UMBER: US/09/956,086
FILING DATE: 20-Sep-2001
CLASSIFICATION: <Unknown>
ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                  ZIP: 20005
COMPUTER READABLE FORM:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TITLE OF INVENTION: SINGLE-CHAIN ANTIGEN-BINDING PROTEINS
CAPABLE OF GLYCOSYLATION, PRODUCTION AND USES THEREOF
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      APPLICANT: FILPULA, DAVID
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     SEQUENCE DESCRIPTION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TELEPHONE: 202-371-2600
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                 APPLICATION NUMBER: US 60/044,449 FILING DATE: 30-APR-1997
                                                                                                                                                                                                                                                                                                                                                                                                            STREET: 1100 NEW YORK AVE., CITY: WASHINGTON
                                                                                                                                                                                                                                                                                                                    MEDIUM TYPE: Floppy disk
                                                                                                                                                                                                                                                                                                                                                                                               STATE: DC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             LENGTH: 723 base pairs
TYPE: nucleic acid
STRANDEDNESS: both
TOPOLOGY: both
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          APPLICATION NUMBER: US 60/063,074
FILING DATE: 27-CCT-1997
APPLICATION NUMBER: US 60/067,341
FILING DATE: 02-DEC-1997
                                                                                                                                                                                                                                                                                                                                                                                                                                                    ADDRESSEE: STERNE,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            NAME/KEY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  REGISTRATION NUMBER: 29, REFERENCE/DOCKET NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TELEFAX: 202-371-2540
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               WHITLOW, MARC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               WANG, MAOLIANG SHORR, ROBERT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     JORGE A. GOLDSTEIN
                                                                                                                                                                                                                                                                                                                                                                             USA
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1..723
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                                                                                                                                                                                                                                                                                                                                                                                                                              KESSLER, GOLDSTEIN & FOX P.L.L.C. ORK AVE., NW, SUITE 600
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Score 15.8;
Pred. No. 1.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Sequence 1, Application US/09956087 Patent No. US20020161201A1 GENERAL INFORMATION:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Matches
                   TELEFAX: (202)371-2540 INFORMATION FOR SEQ ID NO: 1:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TELEFAX: (202)371-2540 INFORMATION FOR SEQ ID NO: 1:
                                                                                                                                         APPLICATION NUMBER: 09/069,821
FILING DATE: 1998-04-30
APPLICATION NUMBER: US 60/063,074
FILING DATE: 27-0CT-1997
APPLICATION NUMBER: US 60/050,472
FILING DATE: 23-JUN-1997
APPLICATION NUMBER: US 60/044,449
FILING DATE: 30-APR 1997
APPLICATION NUMBER: US 60/044,449
FILING DATE: 30-APR 1997
ATTORNEY, ACENT INFORMATION:
                                                                                                                                                                                                                                                                                                                               COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/09/956,087
FILING DATE: 20-Sep-2001
CLASSIFICATION: <UNknown>
                                                                                                                                                                                                                                                                                                                                                                                                                                                             ZIP: 20005
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TITLE OF INVENTION: SINCLE-CHAIN ANTIGEN-BINDING PROTEINS
CAPABLE OF GLYCOSYLATION, PRODUCTION !
                                                    TELECOMMUNICATION INFORMATION: TELEPHONE: (202)371-2600
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        NUMBER OF SEQUENCES: 33
CORRESPONDENCE ADDRESS:
SEQUENCE CHARACTERISTICS
                                                                                                                                                                                                                                                                                                                   PRIOR APPLICATION DATA:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         APPLICANT:
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                                                                                      NAME: KIM, JUDITH U.
REFERENCE/DOCKET NUMBER: 09
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CITY: WASHINGTON
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ADDRESSEE: STERNE, KESSLER, GOLDSTEIN & FOX P.L.L.C. STREET: 1100 NEW YORK AVE., NW, SUITE 600
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TYPE: nucleic acid
STRANDEDNESS: both
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               COUNTRY: USA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    LOCATION:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   REFERENCE/DOCKET NUMBER: 0977.2280003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  LENGTH: 758 base pairs
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Pred. No. 1
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                                                                                          0977.2280003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      .2e+02;
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CURRENT APPLICATION NUMBER: US/09/985,442
CURRENT FILING DATE: 2001-11-02
PRIOR APPLICATION NUMBER: 09/420,592
PRIOR FILING DATE: 1999-10-19
PRIOR APPLICATION NUMBER: 60/104,949
PRIOR FILING DATE: 1998-10-20
NUMBER OF SEQ ID NOS: 13
SOFTWARE: PAtentin Ver. 2.1
SEQ ID NO 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         LOCATION: 1..747;
SEQUENCE DESCRIPTION: SEQ ID NO: 1: US-09-956-087-1
                                                                                                                                                                                                                                         RESULT 14
US-09-791-578-3/c
                                                                                                                                                                                                                                                                                                                                        Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                             ; OTHER INFORMATION: Description of Artificial Sequence: CC49/218; NAME/KEY: CDS; LOCATION: (1)...(771)
US-09-985-442-1
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                                                                                                                                                                                                                                                                                                                                                                   Query Match
Best Local Similarity
Matches 17; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Sequence 1, Application US/0985442
Patent NO. US20020156248A1
GENERAL INFORMATION:
APPLICANT: Filpula, David R.
APPLICANT: Wang, Maoilang
APPLICANT: Whitlow, Marc D.
TITLE OF INVENTION: NO. US20020156248A1el Method
FILE REFERENCE: 0977.2300003
                                                                                                                                                                      Sequence 3, Application US/09791578 Patent No. US20020061307A1 GENERAL INFORMATION:
APPLICANT: WHITLOW, MARC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Matches
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TYPE: DNA
ORGANISM: Artificial Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ENGTH: 782
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                                                 NUMBER OF SEQUENCES: 6
CORRESPONDENCE ADDRESS:
                                                                               LEE, LIHSYNG S.
TITLE OF INVENTION: POLYALKYLENE
POLYPEPTIDES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   FEATURE:
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LOCATION:
ADDRESSEE: STERNE, KESSLER, GOLDSTEIN & FOX P.L.L.C. STREET: 1100 NEW YORK AVENUE, SUITE 600 CITY: WASHINGTON
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 LENGTH: 758 base pairs TYPE: nucleic acid STRANDEDNESS: both
                                                                                                                                                                                                                                                                                                                                                                           Conservative
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                                                                                                                                  FILPULA, DAVID R.
                                                                                                                                                    SHORR, ROBERT G.L.
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89.5%;
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Pred. No. 1
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Pred. No. 1
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                                                                                                  OXIDE-MODIFIED SINGLE CHAIN
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                                                                                                                                                                                                                                                                                                                                                                                                        Length 782;
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USA

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LOCATION: 1..771
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SEQUENCE DESCRIPTION: SEQ ID NO: 3:
US-09-791-578-3
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US-09-791-540-3/c
                                                                                                                                                                                                                                                                                                                                                                Sequence 3, Application US/09791540 Patent No. US20020098192A1 GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Query Match
Best Local Similarity
Matches 17; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               REGISTRATION NUMBER: 29,021
REFERENCE/DOCKET NUMBER: 09
TELECOMMUNICATION INFORMATION:
TELEPHONE: 202-371-2600
TELEFAX: 202-371-2540
INFORMATION FOR SEQ ID NO: 3:
SEQUENCE CHARACTERISTICS:
COUNTRY: USA
ZIF: 20005
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     PRIOR APPLICATION DATA:
APPLICATION NUMBER: 09/069,842
FILING DATE: APPLICATION NUMBER: 05 60/050,472
APPLICATION NUMBER: US 60/063,074
FILING DATE: 23-US-1997
APPLICATION NUMBER: US 60/063,074
FILING DATE: 27-OCT-1997
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        APPLICATION NUMBER: US 60/067,341
FILING DATE: 02-DEC-1997
ATTORNEY/ACENT INFORMATION:
NAME: JORGE A. GOLDSTEIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TOPOLOGY: both
                                                                                                                                                                                                    CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                           NUMBER OF SEQUENCES:
                                                                                                                                                                                                                                            TITLE OF INVENTION: POLYALKYLENE OXIDE-MODIFIED SINGLE CHAIN POLYPEPTIDES
                                                                                                                                                                                                                                                                                                                                               APPLICANT:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           350 GAAGTAGAGCCTTTCAGCA 332
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              3 GAAGTCGAGGCTTTCAGCA 21
                                                                                                                      ADDRESSEE: STERNE, KESSLER, GOLDSTEIN & FOX P.L.L.C. STREET: 1100 NEW YORK AVENUE, SUITE 600 CITY: WASHINGTON STATE: DC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        COMPUTER: IBM PC compatible OPERATING SYSTEM: PC-DOS/MS-DOS SOFTWARE: Patentin Release #1.0,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       LENGTH: 782 base pairs
TYPE: nucleic acid
STRANDEDNESS: both
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                APPLICATION NUMBER: US/09/791,578 FILING DATE: 26-Feb-2001
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Conservative
                                                                                                                                                                                                                                                                                                                    WHITLOW, MARC
SHORR, ROBERT G.L.
                                                                                                                                                                                                                                                                                   FILPULA, DAVID R. LEE, LIHSYNG S.
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NAME/KEY: CDS
LOCATION: 1..771
SEQUENCE DESCRIPTION: SEQ ID NO:
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Search completed: June 12, 2003, 04:58:21 Job time : 154.666 secs
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Best Local Similarity
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     APPLICATION NUMBER: 09/069,842
FILING DATE: 1998-04-30
APPLICATION NUMBER: US 60/050,472
FILING DATE: 23-JUN-1997
APPLICATION NUMBER: US 60/063,074
FILING DATE: 27-0CT-1997
APPLICATION NUMBER: US 60/067,341
FILING DATE: 02-DEC-1997
ATTORNEY/AGENT INFORMATION:
NAME: JORGE A. GOLDSTEIN
REGISTRATION NUMBER: 29,021
REGISTRATION NUMBER: 29,021
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             SOFTWARE: Patentin Release #1.0, Version CURRENT APPLICATION DATA:
APPLICATION UNMBER: US/09/791,540
FILING DATE: 26-Feb-2001
CLASSIFICATION: CURKNOWN>
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                                                                                                                                                                                                                                                                                        MOLECULE TYPE: cDNA FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                    SEQUENCE CHARACTERISTICS:
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                                                                        350 GAAGTAGAGCCTTTCAGCA 332
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                                                                                                                                                                                                                                                                                                                                           TYPE: nucleic acid
STRANDEDNESS: both
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ALIGNMENTS

	FEATURES SOUTCE					COMMENT	JOURNAL	TITLE	AUTHORS	REFERENCE			ORGANISM	SOURCE	KEYWORDS	VERSION	ACCESSION		DEFINITION	LOCUS	BF251708/c	RESULT 1
<pre>/organism="Coccidioides immitis" /db_xref="taxon:5501" /clone="CIAAK37" /clone_lib="Coccidioides immitis spherule cDNA library"</pre>	Location/Qualiflers. 1123	Email: gardner@tigr.org.	Tel: 301 838 3519	9712 Medical Center Drive, Rockville, MD 20850, USA	Department of Eukaryotic Genomics	Contact: Malcolm J. Gardner	Unpublished (2000)	Generation of ESTs from Coccidioides immitis spherule cDNA library	Gardner, M.J. and Kirkland, T.	1 (bases 1 to 123)	Onygenales; mitosporic Onygenales; Coccidioides.	Eukaryota; Fungi; Ascomycota; Pezizomycotina; Eurotiomycetes;	Coccidioides immitis	Coccidioides immitis.	EST.	BF251708.1 GI:16931774	BF251708	immitis cDNA clone CIAAK37 5' sequence, mRNA sequence.	2 Coccidioides immitis sph	BF251708 123 bp mRNA linear EST 15-NOV-2001		·

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Unpublished (2000)
Contact: Malcolm J. Gardner
Contact: Malcolm J. Gardner
Department of Eukaryotic Genomics
The Institute for Genomic Research
The Institute for Jorive, Rockville,
Coccidioides immitis.
Coccidioides immitis.
Coccidioides immitis
Eukaryota; Fungi; Ascomycota; Pezizomycotina; Eurotiomycetes;
Onygenales; mitosporic Onygenales; Coccidioides.
                                                                                                     BF251811 362 bp mRNA linear EST 15-NOV-20 EST419073 Coccidioides immitis spherule cDNA library Coccidioides immitis cDNA clone CIAAM73 5' sequence, mRNA sequence.
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                                                                    EST.
                                                                               BF251811.1 GI:16931954
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Tel: 301 838 3519
Fax: 301 838 0208
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1 (bases 1 to 351)
Gardner, M.J. and Kirkland, T.
Generation of ESTs from Coccidioides
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Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                           /clone_lib="Coccidioides
/dev_stage="spherule"
/lab_host="SOLR"
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/db_xref="taxon:5501"
/clone="CIAAK21"
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Coccidioides immitis.

Coccidioides immitis

Eukaryota; Fungi; Ascomycota; Pezizomycotina; Eurotiomycetes;

Onygenales; mitosporic Onygenales; Coccidioides.

1 (bases 1 to 377)

Gardner, M.J. and Kirkland, T.

Generation of ESTs from Coccidioides immitis spherule cDNA library
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                                                                                                                                                                                                                          Department of Eukaryotic Genomics
The Institute for Genomic Research
9712 Medical Center Drive, Rockville,
                                                                                                                                                                                                                                                                          Unpublished (2000)
Contact: Malcolm J. Gardner
                                                                                                                                                                                                                                                                                                                                                                                                                    EST
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The Institute for Genomic Research
9712 Medical Center Drive, Rockville,
Tel: 301 838 3519
Fax: 301 838 0208
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Gardner, M.J. and Kirkland, T
Generation of ESTs from Coc.
Unpublished (2000)
Contact: Malcolm J. Gardner
                                                                                                                                                                                                                                                                                                                                                                                                                               BF251964.1 GI:16932107
              103
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301 838 0208
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                                                                                                                                                             gardner@tigr.org.
Location/Qualifiers
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Location/Qualifiers
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                                      /note="Vector: pBluescript SK(-);
                                                         /clone_lib="Coccidioides immitis spherule cDNA library"
/dev_stage="spherule"
/lab_host="SOLR"
                                                                                                      /clone="CIAAP15"
                                                                                                                 /organism="Coccidioides immitis"
/db_xref="taxon:5501"
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/dev_stage="spherule"
/lab_host="SOLR"
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Best Local Query Match

Similarity

81.7%; 90.9%;

Score 18.8; D Pred. No. 98; 0; Mismatches

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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Unpublished (2000)
Contact: Malcolm J. Gardner
Contact of Eukaryotic Genomics
Department of Eukaryotic Research
The Institute for Genomic Research
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1 (bases 1 to 378)
Gardner, M.J. and Kirkland, T.
Generation of ESTs from Coccidioides immitis spherule cDNA library
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EST.
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Onygenales; mitosporic Onygenales; Coccidioides.
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1 (bases 1 to 391)
Gardner,M.J. and Kirkland,T.
Generation of ESTs from Coccidioides
Unpublished (2000)
Contact: Malcolm J. Gardner
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Email: gardner@tigr.org.
Location/Qualifiers
                                         Department of Eukaryotic Genomics
The Institute for Genomic Research
9712 Medical Center Drive, Rockville,
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Onygenales; mitosporic Onygenales; Coccidioides.
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301 838 3519
301 838 0208
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             Medical Center Drive,
301 838 3519
301 838 0208
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gardner@tigr.org.
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/dev_stage="spherule"
/lab_host="SOLR"
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/db_xref="taxon:5501"
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Pred. No. 98;
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RESULT 8
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Tel: 45 3327 5230
Fax: 45 3327 4766
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Blumeria graminis f. sp. hordei
Elumeria graminis f. sp. hordei
Eukaryota; Fungi; Ascomycota; Pezizomycotina; Leotiomycetes;
Erysiphales; Erysiphaceae; Blumeria.
                                                                                                                                                                                                                                                                                                                                                                                                  Department of Yeast Genetics Carlsberg Laboratory
                                                                                                                                                                                                                                                                                                                                                                                                                                         expressed sequence 
Unpublished (2000)
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                                                                                                                                                                                                                                                                                                                                                                                                                            Contact: Rasmussen, S.W.
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bmas,S.W., Rasmussen,S.W., Glaring,M.A.,
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/db_xref="taxon:62688"
/clone="D00948"
/clone_lib="Lambda zap, Stratagene"
/cell_type="conidia"
/lab_host="Hordeum vulgare"
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/dev_stage="spherule"
/lab_host="SOLR"
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/db_xref="taxon:5501"
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EST 15-NOV-2001

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REFERENCE
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BF252581/c
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                                                                                                                                                                                                                   Eukaryota; Fungi; Ascomycota; Pezizomycotina; Eurotiomycetes; onygenales; mitosporic Onygenales; Coccidioides.

1 (bases 1 to 502)
Gardner, M. J. and Kirkland, T.
Generation of ESTs from Coccidioides immitis spherule cDNA 11: Unpublished (2000)
Contact: Malcolm J. Gardner
                                                                                                                                                                                                                                                                                                                                                                                                      502 bp mRNA EST419843 Coccidioides immitis spherule immitis cDNA clone CIAAY35 5' sequence, BF252581
                                                                                                                                            Department of Eukaryotic Genomics
The Institute for Genomic Research
9712 Medical Center Drive, Rockville,
Tel: 301 838 3519
Fax: 301 838 0208
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The Institute for Genomic Research
9712 Medical Center Drive, Rockville,
Tel: 301 838 3519
Fax: 301 838 0208
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Contact: Malcolm J. Gardner
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Generation of ESTs from Coccidioides immitis spherule cDNA library
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                                                                                                          gardner@tigr.org.
Location/Qualifiers
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Location/Qualifiers
/clone_lib="Coccidioides
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/lab_host="SOLR"
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/dev_stage="spherule"
/lab_host="SOLR"
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/clone="CIAAK33"
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AW792430/c
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CDNA clone D01189 similar to non-f.
mRNA sequence.
AW792430
AW792430.1 GI:13904027
EST.
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Coccidioides immitis.
Coccidioides immitis
Eukaryota; Fungi; Ascomycota;
                                                                               BF251715 518 bp mRNA linear EST 15-NOV-20 EST41899 Coccidioides immitis spherule cDNA library Coccidioides immitis cDNA clone CIAAK45 5' sequence, mRNA sequence.
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BF251715.1 GI:16931781
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20; Conserv
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Blumeria graminis f. sp. hordei
Blumeria graminis f. sp. hordei
Eukaryota; Fungi; Ascomycota; Pezizomycotina; Leotiomycetes;
Erysiphales; Erysiphaceae; Blumeria.
1 (bases 1 to 515)
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Tel: 45 3327 5230
Fax: 45 3327 4766
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   10 G1.
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/cell_type="conidia"
/lab_host="Hordeum vulgare"
104 c 119 g 142 t
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/db_xref="taxon:62688"
/clone="D01189"
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1. .515
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Pred. No. 1.2e+02;
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Pred. No. 1.2e+02;
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Pezizomycotina; Eurotiomycetes;
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Best Local Similarity
Matches 20; Conserv
   Query Match 81. Best Local Similarity 90. Matches 20; Conservative
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1 (bases 1 to 541)
Gardner, M.J. and Kirkland, T.
Generation of ESTs from Coccidioides immitis spherule cDNA library
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The Institute for Genomic Research
9712 Medical Center Drive, Rockville, MD 20850, USA
Tel: 301 838 3519
Fax: 301 838 0208
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Contact: Malcolm J. Gardner
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1 (bases 1 to 518)
Gardner,M.J. and Kirkland,T.
Generation of ESTs from Coccidioides immitis spi
                                                                                                                                                                                                                                                                                                                    Unpublished (2000)
Contact: Malcolm J. Gardner
Department of Eukaryotic Genomics
The Institute for Genomic Research
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Coccidioides immitis
                                                                                                                                                                                                                                                                          9712 Medical Center Drive,
Tel: 301 838 3519
Fax: 301 838 0208
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Location/Qualifiers
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Location/Qualifiers
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                                                                                                                              /clone_lib="Coccidioides immitis spherule
/dev_stage="spherule"
/lab_host="SOLR"
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Pred. No. 1.
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Other_ESTs: EST445665
Contact: Malcolm J. Gardner
Department of Eukaryotic Genomics
The Institute for Genomic Research
9712 Medical Center Drive, Rockville, MD 20850, USA
Tel: 301 838 3519
Fax: 301 838 0208
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Coccidioides immitis
Eukaryota; Fungi; Ascomycota; Pezizomycotina; Eu
Eukaryota; Fungi; Onygenales; Coccidioides.
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EST445666 Coccidioides immitis spherule cDNA library C
immitis cDNA clone CIGAB68 5' sequence, mRNA sequence.
 Department of Eukaryotic Genomics
The Institute for Genomic Research
9712 Medical Center Drive, Rockville,
Tel: 301 838 3519
                                                            Eukaryota; Fungi; Ascomycota; Pezizomycotina; Eu
Onygenales; mitosporic Onygenales; Coccidioides.
1 (bases 1 to 567)
Gardner, M. J. and Kirkland, T.
Generation of ESTs from Coccidioides immitis sph
Unpublished (2000)
Contact: Malcolm J. Gardner
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Gardner, M.J. and Kirkland, T.
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Site_1: EcoR1; Site_2:

Eurotiomycetes;

Coccidioides

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immitis spherule cDNA library

Eurotiomycetes;

Coccidioides

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Search completed: June 12, 2003, 04:34:58 Job time: 853.943 secs
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Coccidioides immitis

Coccidioides immitis

Eukaryota; Fungi; Ascomycota; Pezizomycotina; Eurotiomycetes;

Conygenales; mitosporic Onygenales; Coccidioides.

1 (bases 1 to 568)

Gardner, M.J. and Kirkland, T.

Generation of ESTs from Coccidioides immitis spherule cDNA library
                                                                                                                                                                                                                                                                                                                                                                                Department of Eukaryotic Genomics
The Institute for Genomic Research
9712 Medical Center Drive, Rockville,
Tel: 301 838 3519
Fax: 301 838 0208
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Email: gardner@tigr.org.
Location/Qualifiers
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/lab_host="SOLR"
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GenCore version 5.1.6 Copyright (c) 1993 - 2003 Compugen Ltd.

OM nucleic - nucleic search, using sw model June 11, 2003, 22:21:06 ; Search time 620.827 Seconds (without alignments) 1921.975 Million cell updates/sec

Title: Perfect score:

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Sequence: US-09-674-195C-15
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Scoring table: IDENTITY_NUC Gapop 10.0 , Gapext 1.0 2054640 seqs, 14551402878 residues

Searched:

Total number of hits satisfying chosen parameters: 4109280

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Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0% Maximum Match 100% Listing first 45 summaries

Database : GenEmbl:* gb_ba:*
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Chrysosporium parvum.

Eukaryota; Fungi; Ascomycota; Pezizomycotina; Eurotiom

Eukaryota; Fungi; Ascomycota; Chrysosporium.

1 (bases 1 to 1699)

Bowman, B.H., White, T.J. and Taylor, J.W.

Human pathogeneic fungi and their close nonpathogenic

Mol. Phylogenet. Evol. 6 (1), 89-96 (1996)
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Bowman, B.H.
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/note="Missing an estimated 50 bases from from the 3' end of the rRNA gene"
3 366 c 468 g 434 t
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                                                                                                                                                                                            <1. .>1699
                                                                                                                                                                                                                                             /organism-"Chrysosporium/strain-"UAMH1067"
                                                                                                                                                                                                                                                                                        Location/Qualifiers
                                                                                                                                                                                                                     /note="Sequenced in
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/1solate="CBS 576.63"
/db_xref="taxon:37235"
                                                                                                                                                                                                                                 db_xref="taxon:41283"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          /product="18S ribosomal RNA"
/note="small subunit rRNA"
364 c 462 g 426 t
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                                                          Score 40.2; DB 8;
Pred. No. 2.7e-06;
1; Mismatches (
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Pred. No. 2.7e-06;
1; Mismatches 0;
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S ribosomal
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RNA
                                                                                      8;
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                                                                                     Length 1699;
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HCC18SRRN/c
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Matches 40; Conserv
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                                                                                                                                                                                                                                                                                                                                                                                                                   Ajellomyces capsulatus.
Ajellomyces capsulatus
Eliomyces capsulatus
Eliomyces capsulatus
Eliomyces; Fungi; Ascomycota; Pezizomycotina; Euronygenales; Onygenaceae; Ajellomyces.

1 (bases 1 to 1704)
Okeke, C.N., Kappe, R., Zakikhani, S., Nolte, O. and Ribosomal genes of Histoplasma capsulatum var. du
Direct Submission
Submitted (06-JUL-1996) Reinhard Kappe, Hygiene & Med.
Microbiology, University of Heidelberg, Hygiene Institute,
Neuenheimer Feld 324, Heidelberg, D-69120, Germany
                                                                          Kappe, R.
                                                                                                                        Mycoses 41 (9-10), 99114487
                                                                                                                                                                                                                                                                          275307.1 GI:1419550
18S ribosomal RNA; 18S rRNA
                                                                                                                                                                                                                                                                                                                H.capsulatum ssp. farciminosum Z75307
                                                                                                         9916456
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Eukaryota; Fungi; Ascomycota; Pezizomycotina; Eurotiomycetes; Onygenales; Onygenaceae; Ajellomyces.

1 (bases 1 to 1704)

Okeke,C.N., Kappe,R., Zakikhani,S., Nolte,O. and Sonntag,H.G. Ribosomal genes of Histoplasma capsulatum var. duboisii and v
                                                                                                                                                                                                                                                                                                                                               HCF18SRRN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Submitted (06-JUL-1996) Reinhard Kappe, Hygiene & Med. Microbiology, University of Heidelberg, Hygiene Institute, Neuenheimer Feld 324, Heidelberg, D-69120, Germany Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Mycoses 41 (9-10), 355-362 (1998)
99114487
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18S ribosomal RNA; 18S rRNA gene; small subunit ribosomal RNA.
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/product="18S rib
a 365 c 470
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/strain="CBS175.57"
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         /sub_species="duboisii"
/db_xref="taxon:5037"
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Pred. No. 2.7e-06;
1; Mismatches 0;
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470 g 437 t
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                                   RESULT 6
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                                                                                                  Ajellomyces dermatitidis.
Ajellomyces dermatitidis
Ajellomyces dermatitidis
Eukaryota; Fungi; Ascomycota; Pezizon
Onygenales; Onygenaceae; Ajellomyces.
1 (bases 1 to 1713)
H.capsulatum DNA for 18S
X58572 S45469
X58572.1 GI:2759
                                                                                                                      1 DTATTAGCTCTAGAATTACCACGGGTATCCAAGTAGTAAGG 41
                                                                                                                                                                                                                                                                                                                                                                                                      Atlantic Avenue, Alameda CA 94501, USA 2 (bases 1 to 1713)
Bowman, B.H., Taylor, J.W. and White, T.J.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  B.dermatiditis,
                                                                                                                                                                                                                                                                                                                                                                  Molecular evolution of the fungi: human Mol. Biol. Evol. 9 (5), 893-904 (1992) 92408455
                                                                                                                                                                                                                                                                                                                                                                                                                               Submitted (08-MAY-1991) B. Bowman, Atlantic Avenue, Alameda CA 94501,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              X59420.1 GI:58322
18S ribosomal RNA; rRNA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       X59420
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                                                                                                                                                              Similarity
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                                                                                                                                                    Conservative
                                                                                                                                                                                                          /product="18S ribosomal RNA"
/note="missing estimated 38 bases from 5' and 49 bases
from 3' end of rRNA coding region. Directly sequenced
from full-length PCR product"
1 367 c 470 g 439 t
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     /gene="185 rRNA"
/product="185 ribosomal RNA"
/product="471 g 437 t
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   /organism="Ajellomyces capsulatus"
/strain="CBS205.35, CBS478.64"
/sub_species="farciminosum"
/db_xref="taxon:5037"
                                                                                                                                                                                                                                                                                     /organism="Ajellomyces
/strain="ATCC 21699"
/db_xref="taxon:5039"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          /gene="18S rRNA"
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Pred. No. 2.7e-06;
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No. 2.7e-06;
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                       linear partial.
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Ajellomyces capsulatus.
Ajellomyces capsulatus
Ajellomyces capsulatus
Eukaryota; Fungi; Ascomycota; Pezizomycotina; Eurotiomycetes;
Eukaryota; Onygenaceae; Ajellomyces.
                                                                                                                                                                                                                         Malbranchea gypsea.
Malbranchea gypsea
Malbranchea gypsea
Eukaryota; Fungi; Ascomycota; Pezizomycotina; Eurotiomycetes;
Onygenales; mitosporic Onygenales; Malbranchea.
1 (bases 1 to 1713)
                                                                                                                                                                                                                                                                                                                                                                                                                             Berbee,M.L. and Taylor,J.W.
Convergence in ascospore discharge mechanism among fungi based on 18S ribosomal RNA gene sequence Mol. Phylogenet. Evol. 1 (1), 59-71 (1992)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Submitted (19-MAR-1991) I
Atlantic Avenue, Alameda
2 (bases 1 to 1713)
                                                                                                                                                                   Pan,S., Sigler,L. and Cole,G.T.
Evidence for a phylogenetic connection between and Uncincarpus reseii (Onygenaceae)
Microbiology 140 (Pt 6), 1481-1494 (1994)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       40;
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                                                                                                                                                                                                                                                                                                                              Malbranchea
L28066
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    94115689
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          /organism="Ajellomyces capsulatus"
/strain="ATCC 11408"
/strain="ATCC 11408"
/db_xref="taxon:5037"
<1. >1713
/product="18S ribosomal RNA"
/product="18S ribosomal RNA"
/note="missing approx. 38 bases frend of coding region"
end of coding region"
a 368 c 473 g 438 t
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/product="18S ribosomal
                                                       /db_xref="taxon:33182"
/cell_type="hyphae"
                                                                                                /organism-"Malbranchea
                          /germline
                                        /dev_stage="mycelial"
                                                                                   'isolate="UAMH 1841"
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97.6%;
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Pred. No. 2.7e

1; Mismatches
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ribosomal
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94501, USA
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 RNA"
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2.7e-06;
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                                                                                                                                                                                                 Coccidioides immitis
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AF241655/c
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ORGANISM
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ORIGIN
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                                                                                                                                                          sequence.
AF241655
                                                            Onygenales; mitosporic Onygenales;
1 (bases 1 to 1726)
Kasuga,T., Taylor,J.W., White,T.J.
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                                                                                                                                                                                                                                                                                                   40;
   2 (bases 1 to 1726)
Kasuga, T., Taylor, J.W.,
                          Evolution of Histoplasma Unpublished
                                                                                              Paracoccidioides brasiliensis.
Paracoccidioides brasiliensis
Eukaryota; Fungi; Ascomycota;
                                                                                                                                               AF241655.3
                                                                                                                                                                                 Paracoccidioides brasiliensis
                                                                                                                                                                                              AF241655
                                                                                                                                                                                                                                                                                                                                                                                                                                                     Submitted (06-MAR-2000) Ecology University, Umea 90187, Sweden
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Winka, K
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Acrospermum gramineum
Eukaryota; Fungi; Ascomycota;
Chaetothyriomycetes incertae :
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                AF242259 1721 bp DNA Acrospermum gramineum specimen-voucher gene, partial sequence.
AF242259
AF242259.1 GI:15592874
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Direct Submission
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Winka, K. and Eriksson, O.E.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Thesis (2000) Umea University, 2 (bases 1 to 1721)
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440 a 362 c 467
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/specimen_voucher="UME 31190"
/db_xref="taxon:152640"
                                                                                                                                                                                                                                                                                                                                                        /product="18S r1bosomal RNA"
372 c 471 g 437 t
                                                                                                                                                                                                                                                                                                                                                                                                                                         location/Qualifiers
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Pred. No. 2.7e-06;
1; Mismatches 0;
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   White, T.J.,
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iensis 18S
                                                            White, T.J.,
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sedis; Acrospermaceae; Acrospermum.
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ribosomal RNA gene,
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   Camargo, Z.
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AF320009/c
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Direct Submission
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98.0%;
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Direct Submission
Submitted (12-JUN-2000) Roche Molecula
Ave., Alameda, CA 94501, USA
Sequence update by submitter
On Jun 12, 2000 this sequence version
Location/Qualifiers
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Direct Submission
Submitted (23-MAY-2000) Roche
Submitted (23-MAY-2000) Roche
Submitted (23-MAY-2000) Roche
                                                                                                                                                                                                                                                                                                                                                                                   Ajellomyces capsulatus,
Ajellomyces capsulatus
Eukaryota; Fungi; Ascomycota;
                                                                                                                                                                                                                Kasuga,T., White,T.J. and Taylor,J.W.
Direct Submission
Submitted (07-NOV-2000) Roche Molecul
Ave., Alameda, CA 94501, USA
                                                                                                                                                                                                                                                                                                               Onygenales; Onygenaceae; Ajellomyces.

1 (bases 1 to 1726)

Kasuga,T., White,T.J. and Taylor,J.W.
The Molecular Clock in Fungi in the Class
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Submitted (03-MAR-2000) Roche Ave., Alameda, CA 94501, USA
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/isolate="pb18"
/db_xref="taxon:121759"
/country="Brazil"
<1. .>1726
                                                /product="18S ribosomal RNA"
371 c 475 g 440 t
                                                                                               /db_xref="taxon:5037"
/note="class 2 North /
                                                                                                                                /organism="Ajellomyces capsulatus"
/strain="ATCC26032; G217B"
/db_xref="ATCC:26032"
                                                                                                                                                                                                  Location/Qualifiers
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371 c 472 g 437 t
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(pases 1 to 1726)

(kasuga,T., White,T.J. and Taylor,J.W. Direct Submission

Submitted (07-NOV-2000) Roche Molecul

Submitted (CA 94501, USA
                                                                                                                                                                                                                                                                                                                                                                                Ajellomyces
                                                                                                                                                                                                                                                                                                                                                                                                                         40;
                                                                                              Bialek,R., Ibricević,A., Fothergill,A. and Begerow,D. Small subunit ribosomal DNA sequence shows Paracoccidioides brasiliensis closely related to Blastomyces dermatitidis J. Clin. Microbiol. 38 (9), 3190-3193 (2000)
                                                                                                                                                  Onygenales; mitosporic Onygenales;
1 (bases 1 to 1759)
                                                                                                                                                                                                                                                      complete sequence. AF227151
                                                                                                                                                                                                                                                                                  Paracoccidioides brasiliensis
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Onygenales; Onygenaceae; Ajellomyces.
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Submitted (20-JAN-2000) Spezielle Tuebingen, Auf der Morgenstelle 1,
                                                                                                                                                                                              Paracoccidioides brasiliensis
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                                        Begerow, D
                                                                                                                                                                                  Eukaryota; Fungi; Ascomycota; Pezizomycotina; Eurotiomycetes;
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/db_xref="taxon:5039"
<1. .>1726
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          /product="18S ribosomal RNA"
370 c 471 g 442 t
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             /organism="Ajellomyces
/strain="ATCC60915"
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HTCC60915
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Mismatches 0;
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Tuebingen 72076,
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                                                         Query Match
Best Local Similarity
Matches 40; Conserv
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151
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Paracoccidioides brasiliensis
Paracoccidioides brasiliensis
Eukaryota; Fungi, Ascomycota; Pezizomycotina; Eurotiomycetes;
Eukaryota; Fungi, Onygenales; Paracoccidioides.
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                                                                                                                                                                                                                                                                                           Submitted (24-FEB-2000) Medical Technology Program, University, 322 North Kedzie Lab, East Lansing, MI
                                                                                                                                                                                                                                                                                                                                                                                                                                  2 (bases 1 to 1771)
Herr,R.A., Tarcha,E.J.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Phylogenetic analysis of Lacazia loboi places this previously uncharacterized pathogen within the dimorphic Onygenales
J. Clin. Microbiol. 39 (1), 309-314 (2001)
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AF238302
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                                                                                                                                                                                                                                                                                                                                                       3 (bases 1 to 1771)
Herr,R.A., Taborda,P.R.,
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                DTATTAGCTCTAGAATTACCACGGGTATCCAAGTAGTAAGG
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                                                                                                                                                                                                 /isolate="63265"
/db_xref="taxon:121759"
/note="Argentinian isol:
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/strain="R-2878"
                                                                                                                                                                                  recovered from a patient with
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380 c 485 g 452 t
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                                                                          98.0%;
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97.6%;
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Pred. No. 2.7e-06;
                                                         Score 40.2; DB 8;
Pred. No. 2.7e-06;
1; Mismatches 0;
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48824-1031,
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Blastomyces dermatitidis 185 ribosomal RNA. M63096 GI:173895
185 ribosomal RNA.
Blastomyces dermatitidis 185 ribosomal RNA.
Blastomyces
                                                                  40;
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1 (bases 1 to 1800)
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                                                                                                                                                                                                                                                                                                                                                                                                         Small subunit ribosomal RNA of Blastomyces dermatitidis: and phylogenetic analysis J. Gen. Microbiol. 138 (Pt 2), 395-399 (1992)
                                                                                                                                                                                                                                                                                                                                                                                                                                                           Geber,A., Higgins,D.E., Waters,A.P., Bennett,J.E.
McCutchan,T.F.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Unpublished (1990)
Location/Qualifiers.
1. .1799
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1799 bp DNA linear PLN 12-APR-1994
Blastomyces dermatitidis small subunit ribosomal RNA gene sequence.
M55624
M55624 GI:166961
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1 (bases 1 to 1799)
Sogin,M.L. Bibeau,C., Elwood,H., Stickel,S., Weisburg,W.G.,
Barnes,S.R. and Lane,D.L.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Phylogenetic relationships between major classes of fungi
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Eukaryota; Fungi; Ascomycota; Pezizomycotina; Eurotiomycetes;
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                                                                  Conservative
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                                                                                                                                                                                          /product="18S ribosomal RNA"
1352
                                                                                                                                     /gene="18S rRNA"
/note="G or C polymorphism"
/84 c 490 g 466 t
                                                                                                                                                                                                                                                                                                  /organism="Ajellomyces dermatitidis"
/db_xref="taxon:5039"
/dev_stage="yeast"
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/db_xref="taxon:5039"
384 c 491 g 462 t 2 o
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/gene="18S rRNA"
                                                                                                                                                                                                                                                    gene="18S rRNA"
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                                                                            98.0%;
97.6%;
                                                            Score 40.2; DB 8;
Pred. No. 2.7e-06;
1; Mismatches 0;
                                                                                           Length 1800;
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Search completed: June 12, 2003, 02:33:51 Job time: 622.827 secs

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score greater than or equal to the score of the result being printed,
and is derived by analysis of the total score distribution..
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Copyright (c) 1993 - 2003 Compugen Ltd
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                            AAQ73435
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                                                                                                                                                                                                                                                                                                                                                                SUMMARIES
                                                                                                                                                                                                                                                                               Description
                                                                                                                                                                    Histoplasma capsul
G. vesiculiferum s
G. intraradices sm
                                  Deuteromycetes pol
Fusarium oxysporum
                                                                                         Bulgaria inquinans
                                                                                                          Fusarium venenatum
                                                                                                                                          Fusarium venenatum
        genomic
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45	44	43	42	41	40	39	38	37	36	ω G	ω 4	ω ω	32	31	30	29	28	27	26	25	24	23	22	21	20	19	80	17	16.	15	14	u u	12	11	10
32.4	32.4	32.4				•	32.4	32.4	•	32.4	32.4	32.4	32.4	32.4	32.4	32.4			32.4	32.4	32.4	32.4	32.4	32.4	32.4	32.4	34.4	34.4	36.6	37	37	37	37	37	37
79.0	79.0	79.0		79.0		79.0	79.0	79.0	79.0	79.0	٠		79.0	79.0	79.0	•		79.0	79.0	79.0	79.0	79.0		•		•		83.9	89.3	•	•	Õ	Ō	90.2	90.2
1210	968	870	642	574	546	539	451	443	395	382	382	353	344	341	265	199	187	187	183	174	161	141	140	136	135	135	1904	1793	444	1840	1821	1745	w		447
24	21	24	23	23	23	13	21	23	22	23	23	23	23	23	21	23	23	23	23	23	24	22	22	23	23	23	19	19	15	19	19	24	20	21	15
ABQ5504B	AAC59573	AAD31836	ABV60693	ABV03418	ABV03426	AAQ27828	AAH30588	ABV35292	AAL35487	ABV44292	ABV35464	ABV14380	ABV05211	ABV35504	AAC98392	ABV12562	ABV12595	ABV12587	ABV33694	ABV05029	ABQ55313	AAL15152	AAL23998	ABV14421	ABV14198	ABV12559	AAV60108	AAV60107	AAQ71869	AAV54086	AAV54087	ABA01152	AAZ00859	AAF11545	AAQ71870
השוומו כימדדמו מווכד	secreted pr	pancreati	Human prostate exp		Human prostate exp	Fetal calf TP (cDN	_	Human prostate exp	Human musculoskele	Human prostate exp	Human prostate exp					Human prostate exp			Human prostate exp		Human ovarian anti	Human breast cance	Human breast cance	Human prostate exp	Human prostate exp	Human prostate exp	Rhizoctonia solani	Rhizoctonia solani	G. margarita small	Nucleotide sequenc	Nucleotide sequenc	Deuteromycetes pol	A. fumigatus 18S r	Aspergillus niger	É. pisiformis smal

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0.0

ALIGNMENTS

AAQ73435 standard; DNA; 40 BP

18-MAY-1995 (first entry)

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Probe; detection; Histoplasma capsulatum; 18S; rRNA; rDNA; hybridisation; Saccharomyces cerevisiae; fungus; phylogenetic; helper probe; soil; water; Blastomyces dermatitidis; quantitation; sample; body fluid; ss.
                                                                                                                                                                                Synthetic.
                                                                                                                                                                                                                                               Histoplasma
Hybridisation probe specific for Histoplasma capsulatum - allowing differentiation from all other fungi for detection
                                                                                                                                         04-OCT-1994
                                                                                                                                                             US5352579-A.
                                WPI; 1994-316178/39.
                                                                                              28-JUN-1991;
                                                                                                                    28-JUN-1991;
                                                                         (GENP-) GEN-PROBE INC
                                                                                                                                                                                                                                               capsulatum hybridisation helper probe #2
                                                                                              91US-0720587.
                                                                                                                  91US-0720587.
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Fungus

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RESULT
AAQ7186
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Best Local
                                                                       The gene sequence of the small ribosomal subunit RNA of arbuscular endomycorrhizal fungi obtained from Glomus vesiculiferum, Glomus intraradices and Gigaspora margarita were compared with that of a non-arbuscular endomycorrhizal fungus, Endogone pisiformis, in order to design taxon specific primers/probes.
                                                    Sequence 447 BP; 135 A; 86 C; 107 G;
                                                                                                                                                          Disclosure;
                                                                                                                                                                               endomycorrhizal fungi in plant
                                                                                                                                                                                                                     WPI; 1994-264577/33.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   LT 2
1867,
                                                                                                                                                                                           New oligonucleotide probes - used for the
                                                                                                                                                                                                                                               Lalonde M,
                                                                                                                                                                                                                                                                                                                                                                                                Glomus vesiculiferum
                                                                                                                                                                                                                                                                                                                                                                                                                     Nuclear 18S ribosomal gene; SSU; parbuscular endomycorrhizal fungi;
                                                                                                                                                                                                                                                                                                23-DEC-1992;
                                                                                                                                                                                                                                                                                                                       23-DEC-1992;
                                                                                                                                                                                                                                                                                                                                                 24-JUN-1994
                                                                                                                                                                                                                                                                                                                                                                          CA2086136-A
                                                                                                                                                                                                                                                                                                                                                                                                                                                      G. vesiculiferum small ribosomal subunit RNA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         A probe (AAQ73433) or its complement (AAQ73436) and corresponding RNA sequences (AAQ73437 and AAQ86436) used for the specific detection of all strains of Histoplasma capsulatum (H.C.). The probes are manufactured complementary to the H.C. 18s rRNA or rDNA gene. This region also corresponds to the bases 172-193 of Saccharomyces cerevisiae 18s rRNA. The probe is specific for H.C. and can be used to distinguish the fungus from all others, even its nearest phylogenetic neighbour Blastomyces dermatitidis. Nucleic acid hybridisation of the specific probe is enhanced by the use of helper probes (AAQ73434-5). This method allows the detection and/or the quantitation of H.C. from samples e.g. body
                                                                                                                                                                                                                                                                       (SIMO/) SIMON L.
                                                                                                                                                                                                                                                                                                                                                                                                                                   Nuclear 18S ribosomal
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     23-MAR-1995
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              AAQ71867;
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AAQ71867 standard; DNA; 447
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Sequence 40
                     Local
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Local Similarity
       39;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          6,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                40;
                     Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      tissue samples, soil and water.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TATTAGCTCTAGAATTACCACGGGTATCCAAGTAGTAAGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TATTAGCTCTAGAATTACCACGGGTATCCAAGTAGTAAGG
       Conservative
                                                                                                                                                          Page 18;
                                                                                                                                                                                                                                             Simon L;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         BP; 13 A; 7 C; 9 G; 11 T; 0 other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 (first entry)
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Pred. No. 9.4e
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; plant; root;
                                                                                                                                                                             samples
                                                    118 T; 1 other;
               DB 15;
.4e-07;
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1.7e-07
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   Indels
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ID AAQ718
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                                                                                                                                                                                                                                           Matches
                                                                                                                                                                                                                                                               Query Match
                     Multiple gene expression; filamentous fungal cell; EST; expressed sequence tag; Fusarium venenatum; Aspergillus niger; Aspergillus oryzae; Trichoderma reesei; identification; recomb culture condition; environmental stress; spore morphogenesis;
                    metabolic
                                                                                 Fusarium
                                                                                                     13-MAR-2001
                                                                                                                                                                                                                                                                                                The gene sequence of the small ribosomal subunit RNA of arbuscular endomycorrhizal fungi obtained from Glomus vesiculiferum, Glomus intraradices and Gigaspora margarita were compared with that of a non-arbuscular endomycorrhizal fungus, Endogone pisiformis, in order to design taxon specific primers/probes.
                                                                                                                          AAF08498
                                                                                                                                             AAF08498 standard;
                                                                                                                                                                                                                                                                                  Sequence 447 BP; 137
                                                                                                                                                                                                                                                                                                                                                                    Disclosure; Page 19;
                                                                                                                                                                                                                                                                                                                                                                                   New oligonucleotide probes - used for the detection endomycorrhizal fungi in plant root samples
                                                                                                                                                                                                                                                                                                                                                                                                                       WPI; 1994-264577/33
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   23-DEC-1992;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CA2086136-A
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         G. intraradices small
                                                                                                                                                                                                                                                                                                                                                                                                                                           Lalonde M, Simon
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       23-DEC-1992;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             24-JUN-1994.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Glomus intraradices.
                                                                                                                                                                                                                                                                                                                                                                                                                                                               (SIMO/) SIMON L.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      AAQ71868 standard;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              23-MAR-1995
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                                                                                                                                                                                                                                                      Local
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                                                                                                                                                                                                               1 DTATTAGCTCTAGAATTACCACGGGTATCCAAGTAGTAAGG 41
                                                                                                                                                                                                                                           39;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     venenatum
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                                                                                                                                                                                             STATTAGCTCTAGAATTACCACGGTTATCCAAGTAGTAAGG
                 pathway
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endomycorrhizal fungi;
                                                                                                                                                                                                                                          Conservative
                                                                                                  (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  92CA-2086136
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              ; environmental stress; spore morphogenesis;
engineering; catabolic pathway engineering;
                                                                               EST SEQ
                                                                                                                                            CDNA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      DNA; 447
                                                                                                                                                                                                                                                   94.18;
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                                                                                                                                                                                                                                                                                                                                                                  40pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ribosomal subunit RNA
                                                                                                                                            570
                                                                            ID NO:1021.
                                                                                                                                            ВP
                                                                                                                                                                                                                                                 Score 38.6;
Pred. No. 9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ΒP
                                                                                                                                                                                                                                                                              107 G; 117 T; 0 other;
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                                                                                                                                                                                                                                                                                                                                                                                               arbuscular
                                recombination;
                                                                                                                                                                                                                                                          447;
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                                                                                                                                                                                                                                    Gaps
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Fusarium venenatum

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The present invention describes a method for monitoring differential CC expression of genes in a first filamentous fungal (FF) cell relative to CC expression of the same genes in one or more second filamentous fungal CC cells. The method uses fluorescence-labeled nucleic acids isolated from the FF cells and a substrate of expressed sequence tags (EST). The ESTS CC are used in the methods for monitoring differential expression of genes in a first filamentous fungal (FF) cell relative to expression of genes CC in a first filamentous fungal (FF) cell relative to expression of the ESTS composition of genes from FF cells allows the production potential of the microorganisms to be improved. New genes may be composited and gene copy number variation and stability can be discovered, possible functions of unknown open reading frames can be comploogenesis, recombination, metabolic or catabolic pathway composition comploogenesis, recombination, metabolic or catabolic pathway composition composition of genes conditions, environmental stress, spore compinedering. Using ESTS provides several advantages over genomic or random cDNA clones including elimination of redundancy as one spot on an array equals one gene or open readding frame, and organisation of the composition of the results. AAPO1478 to AAF11873 represents ESTS from Aspergillus organism to AAF11878 represents ESTS from Aspergillus organe; and composition of AAF11873 represents ESTS from Trichoderma reesel, which are cc all specifically claimed in the present invention.
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                                                                                                                                                                                                            AAF10913/c
                                                                                                                                                                                                                                                                                                                                             Matches
                                                                                                                                                                                                                                                                                                                                                                        Query Match
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              22-MAR-2000;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Claim 86;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                substrate of
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             22-MAR-1999;
expressed sequence tag; Fusarium venenatum; Aspergillus niger; Aspergillus oryzae; Trichoderma reesel; identification; recombination; culture condition; environmental stress; spore morphogenesis; metabolic pathway engineering; catabolic pathway engineering; ss.
                                                                                               Fusarium
                                                                                                                             13-MAR-2001
                                                                                                                                                            AAF10913;
                                                                                                                                                                                            AAF10913 standard; cDNA;
                                                                                                                                                                                                                                                                                                                                                                                                       Sequence 570
                                                                Multiple
                                                                                                                                                                                                                                                                                                                                                          Local
                                                                                                                                                                                                                                                                            393
                                                                                                                                                                                                                                                                                                            ٢
                                                                                                                                                                                                                                                                                                                                           . Similarity 39; Conser
                                                                                                                                                                                                                                                                          gene
                                                                                             venenatum
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Page 772; 3161pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              NORDISK BIOTECH INC NORDISK AS.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            2000WO-US07781
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                expressed
                                                                                                                                                                                                                                                                                                                                                                                                        BP; 153 A; 136
                                                                                                                             (first entry)
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                                                                expression;
                                                                                               EST SEQ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Shuster JR,
                                                                                                                                                                                                                                                                                                                                                         94.1%;
95.1%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                sequence tags
                                                                                                                                                                                              617
                                                                filamentous fungal cell; EST;
                                                                                               ID NO:3436.
                                                                                                                                                                                                                                                                                                                                           Score 38.6; Depred. No. 9.7e
                                                                                                                                                                                                                                                                                                                                                                                                          C; 113 G;
                                                                                                                                                                                              ВP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Kauppinen S,
                                                                                                                                                                                                                                                                                                                                                                                                            166
                                                                                                                                                                                                                                                                                                                                                            9.7e-07;
                                                                                                                                                                                                                                                                                                                                                                                                          T; 2 other;
                                                                                                                                                                                                                                                                                                                                                                           21;
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                                                                                                                                                                                                                                                                                                                                                                           Length 570;
                                                                                                                                                                                                                                                                                433
                                                                                                                                                                                                                                                                                                                                             Indels
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                                                                                                                                                                                                                                                                                                                                             Gaps
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                                                                                                                                                                                                                                                                                                                                                                                               engineering. Using ESTs provides several advantages over genomic or random cDNA clones including elimination of redundancy as one spot on an array equals one gene or open reading frame, and organisation of the microarrays based on function of the gene products to facilitate analysis of the results. AAF07478 to AAF11247 represents ESTs from Aspergillus Pusarium venenatum; AAF11248 to AAF11853 represents ESTs from Aspergillus oryzae; and AAF11879 to AAF11879 represents ESTs from Aspergillus oryzae; and AAF14879 to AAF1875 are seen to Trichoderma reesei, which are all specifically claimed in the present invention.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               are used in the methods for monitoring differential expression of genes in a first filamentous fungal (FF) cell relative to expression of the same genes in one or more second filamentous fungal cells. Monitoring the global expression of genes from FF cells allows the production potential of the microorganisms to be improved. New genes may be discovered, possible functions of unknown open reading frames can be identified and gene copy number variation and stability can be monitored. The expression of genes can be used to study how FF cells adapt to changes in culture conditions, environmental stress, spore morphogenesis, recombination, metabolic or catabolic pathway
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        The present invention describes a method for monitoring differential expression of genes in a first filamentous fungal (FF) cell relative texpression of the same genes in one or more second filamentous fungal cells. The method uses fluorescence-labeled nucleic acids isolated from the FF cells and a substrate of expressed sequence tags (EST). The EST
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            WPI;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Fusarium venenatum
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Monitoring differential expression of genes in filamentous uses fluorescence-labeled nucleic acids isolated from the c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Claim 86; Page 1589; 3161pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Berka RM,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          22-MAR-1999;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         (NOVO ) NOVO NORDISK BIOTECH (NOVO ) NOVO NORDISK AS.
                            Bulgaria inquinans M-3;
                                                                                                                           AAI68286;
                                                                                                                                                                                                                                                                                                                                                                      Sequence
                                                           Bulgaria
                                                                                           19-DEC-2001
                                                                                                                                                          AAI68286 standard; DNA;
                                                                                                                                                                                                                                                                                                                        Local
                                                                                                                                                                                                                                        1 DTATTAGCTCTAGAATTACCACGGGTATCCAAGTAGTAAGG
                                                                                                                                                                                                                                                                                                       Similarity
39; Conserv
                                                                                                                                                                                                                                                                                                                                                                      617
                                                           inquinans M-3 18S rDNA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             of expressed sequence
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                                                                                                                                                                                                                                                                                                                                                                      BP; 155
                                                                                           (first entry)
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                                                                                                                                                                                                                                                                                                                      94.18;
95.18;
                                                                                                                                                                                                                                                                                                                                                                      A; 139 C; 140 G;
                                                                                                                                                            1731
                              18S rDNA;
                                                                                                                                                            ВP
                                                                                                                                                                                                                                                                                                         Score 38.6; DB 2:
Pred. No. 9.8e-07;
1; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             tags
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Kauppinen
                              indole; M-3-A; antifungal;
                                                                                                                                                                                                                                                                                                                                                                         171 T;
                                                                                                                                                                                                                                                                                                                                         DB 21;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            'n
                                                                                                                                                                                                                                                                                                                                                                         12 other;
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                                                                                                                                                                                                                                                                                                                                           617;
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cells and a
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6

leaf spot;

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RESULT 7
ABA01154,
ID ABAC
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Best Local (
                                                                                                                                                                                                                                                                                                                                                                                                                                      Matches
 The present invention relates to a new microbe of Acinetobacter or Burkholderis genus producing aldonic acid and oxidising specifically the hemiacetal hydroxy group of a saccharide having said hydroxy group. Aldonic acid is used as a mineral reinforcing agent. The present sequence was used to illustrate the present invention.
                                                                Disclosure;
                                                                                    A new microbe for producing aldonic acid, Acinetobacter or Burkholderis -
                                                                                                                                                                 27-DEC-1999;
                                                                                                                                                                                     26-DEC-2000;
                                                                                                                                                                                                                           JP2001245657-A
                                                                                                                                                                                                                                              Deuteromycetes sp
                                                                                                                                                                                                                                                                 Aldonic acid;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Claim
                                                                                                                                                                                                         11-SEP-2001
                                                                                                                                                                                                                                                                                  Deuteromycetes polynucleotide SEQ
                                                                                                                                                                                                                                                                                                        24-JAN-2002
                                                                                                                                                                                                                                                                                                                            ABA01154;
                                                                                                                                                                                                                                                                                                                                              ABA01154 standard;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                The invention relates to a fungal derived indole derivative M-3-A with antifungal activity useful in the treatment of leaf spot of rice with M-3-A. The present sequence is that of the Bulgaria inquinans M-3 18S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Sequence 1731 BP;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             indole derivative M-3-A, has antifungal activity
                                                                                                                                                                                                                                                                                                                                                                                               133
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             2001-621605/72
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            3; Page
                                                                                                                                                                                                                                                                                                                                                                                                     1 DTATTAGCTCTAGAATTACCACGGGTATCCAAGTAGTAAGG
                                                                                                                                     TAKEHARA KAGAKU KOGYO OSAKA CITY.
                                                                                                                                                                                                                                                                                                                                                                                                                                     39;
                                                                                                                                                                                                                                                                                                                                                                                                                                            Similarity
                                                                                                                                                                                                                                                                                                                                                                                          GTATTAGCTCTAGAATTACCACGGTTATCCAAGTAGTAAGG
                                                             Page 18-19; 22pp; Japanese.
                                                                                                                                                                                                                                                                                                                                                                                                                                   Conservative
                                                                                                                                                                                    2000JP-0394766
                                                                                                                                                                                                                                                                                                      (first entry)
                                                                                                                                                                                                                                                                 ds.
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                                                                                                                                                                 99JP-0369714.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            6; 9pp; Japanese.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         459 A;
                                                                                                                                                                                                                                                                                                                                              DNA;
                                                                                                                                                                                                                                                                                                                                                                                                                                          94.1%;
                                                                                                                                                                                                                                                                                                                                              1731
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         351 C;
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Pred. No. 1.1e
1; Mismatches
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                                                                                          comprises a
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                                                                                                                                                                                                                                                                                                                                                                                                                                                    DB 22;
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                                                                                          new
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RESULT
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AAV61668/
ID AAV6
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Best Local S
Matches 39
                                                                                                                                                                                     Matches
Gibberellin; 185 rRNA; internal transcribed spacer region; ITS1; ITS2; 5.85 rRNA; LTB-1027; species differentiation; GA_4; GA_3; GA_7; flowering; fruit cell elongation; apple; pear; grape; fruit;
                                         Fungus genomic DNA spanning
                                                             29-JAN-2002
                                                                                 AAS16211;
                                                                                                 AAS16211 standard;
                                                                                                                                                                                                                                    This DNA sequence encodes a fragment of a Fusarium oxysporum f.sp. fragaria 18S rRNA gene which is used in a method for the detection and identification of a fungus of Fusarium genus. The process can bused to detect or identify microbes rapidly and exactly.
                                                                                                                                                                                                                                                                                                    Use of oligo:nucleotide for detecting and of Fusarium genus - as primer or probe to microbes rapidly and exactly
                                                                                                                                                                                                                       Sequence 1771 BP;
                                                                                                                                                                                                                                                                                       Example 1; Page 7-8;
                                                                                                                                                                                                                                                                                                                                                                                 28-FEB-1997;
                                                                                                                                                                                                                                                                                                                                                                                                                                       JP10234380-A.
                                                                                                                                                                                                                                                                                                                                                          (SHIN-) SHINKINRUI KINO KAIHATSU KENKYUSHO KK.
                                                                                                                                                                                                                                                                                                                                                                                                  28-FEB-1997;
                                                                                                                                                                                                                                                                                                                                                                                                                     08-SEP-1998.
                                                                                                                                                                                                                                                                                                                                                                                                                                                       Fusarium oxysporum.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Fusarium oxysporum
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              03-DEC-1998
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         18S rRNA; detection; identification;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  AAV61668;
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                                                                                                                                                                                            Local
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                                                                                                                                                                                                                                                                                                                                            1998-535034/46
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                131
                                                                                                                                                      39;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Similarity
                                                                                                                                            GTATTAGCTCTAGAATTACCACGGTTATCCAAGTAGTAAGG 126
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                                                                                                                                                                                   Conservative
                                                            (first entry)
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                                                                                                                                                                                                                      438 A; 377 C; 477
                                                                                                 DNA;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  DNA; 1771
                                                                                                                                                                                           94.18;
95.18;
                                                                                                                                                                                                                                                                                   20pp; Japanese.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          94.18;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         fragaria
                                          18S,
                                                                                                                                                                                  1;
                                                                                                                                                                                Score 38.6; D
Pred. No. 1.1e
1; Mismatches
                                                                                                 ВP
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Pred. No. 1
                                         5.8S and 28S
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                                                                                                                                                                                                                    G; 461 T; 18 other;
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                                                                                                                                                                                                                                                                                                               identification of fungus detect of identify
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             91
                                        ITS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1731;
                                       sequences
                                                                                                                                                                                0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                0
                                                                                                                                                                                                                                               can be
                                                                                                                                                                                Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Gaps
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RESULT 10
AAQ71870/c
ID AAQ71
XX
AC AAQ71
XX
AC AAQ71
XX
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                                                                                                                                              Query Match
Best Local S
Matches 39
                                                                                                                                                                                                           This sequence represents a genomic DNA sequence containing the 18S rRNA gene, internal transcribed spacer regions I and 2 [ITS1, ITS2] and 5.8S rRNA sequences from a mutant strain of Gibberella fukikoroi (LTB-1027) of the invention. This region of DNA is highly variable and can be used for species and strain differentiation. The LTB-1027 mutant produces a mixture of gibberellins which is at least 70 % GA_4 and GA_7. Gibberellins GA_4 and GA_7 promote flowering and fruit cell elongation, and are used by growers of apples, pears and grapes to produce larger fruits and earlier harvests. The mixture of GA_3, GA_4 and GA_7 achieved using the method of this invention should be particularly useful in the apple industry where GA_4 has been found more effective in russet control and in promoting fruit set. This method produces GA_4 and GA_7 in much higher titers than prior art methods.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        misc_feature
                                                                                                                                                                                                                                                                                                                                                                                             A new method for producing a mixture of gibberellins from Gibberella fujikuroi results in high titers of GA4 and GA7 useful to promote flowering and fruit growth in the fruit growing industry – \,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Gallazzo JL,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        31-AUG-1999;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       misc_feature
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        misc_feature
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         misc_feature
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Gibberella fujikuroi
                                                                                                                                                                                         Sequence 2293 BP;
                                                                                                                                                                                                                                                                                                                                                                          Example 4;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             23-AUG-2000;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    11-SEP-2001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          US6287800-B1
 23-MAR-1995
                      AAQ71870;
                                            AAQ71870
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      (LEEM/) LEE M D.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  (GALL/) GALLAZZO J L.
                                                                                                                                                                                                                                                                                                                                                                                                                                            2001-662197/76.
                                                                                                   146 GTATTAGCTCTAGAATTACCACGGTTATCCAAGTAGTAAGG
                                                                                                                                               39;
                                                                                                                                                          Similarity
                                                                                                             DTATTAGCTCTAGAATTACCACGGGTATCCAAGTAGTAAGG
                                            standard;
                                                                                                                                                                                                                                                                                                                                                                         Column 9-12; 7pp; English.
                                                                                                                                               Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             2000US-0645073
(first
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Lee
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        99US-151770P
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       /"note= "18S rRNA gene"
1775..1921
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    /*tag= b
/note= "ITS1 region"
1922..2078
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                /note= "ITS2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               'note=
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       244..2293
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ¥
                                                                                                                                                                                         596 A; 527 C; 592 G;
                                                                                                                                                        94.1%;
95.1%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ..2243
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              "28S rRNA gene"
                                             447
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 .8S rRNA
                                            ВP
                                                                                                                                             1;
                                                                                                                                             Score 38.6; D
Pred. No. 1.2e
1; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               region"
                                                                                                                                                                                         578 T; 0 other;
                                                                                                                                                       DB 23;
                                                                                                                                              <u>ب</u>
                                                                                                                                                                 Length
                                                                                                                                              Indels
                                                                                                  106
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                                                                                                                                                                    2293;
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                                                                                                                                             Gaps
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RESULT 11
AAF11545/c
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                                                                                                                                                                                                                                                                                                                                                  Query Match
                                                                                                                                                                                                                                                                                                                                                                                                           The gene sequence of the small ribosomal subunit RNA of arbuscular endomycorrhizal fungi obtained from Glomus vesiculiferum, Glomus intraradices and Gigaspora margarita were compared with that of a non-arbuscular endomycorrhizal fungus, Endogone pisiformis,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                E. pisiformis small ribosomal subunit RNA
                                                                               expressed sequence tag; Fusarium venenatum; Aspergillus niger; Aspergillus oryzae; Trichoderma reesei; identification; recomb culture condition; environmental stress; spore morphogenesis;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               New oligonucleotide probes - used for the detection endomycorrhizal fungi in plant root samples
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CA2086136-A
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              arbuscular
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Nuclear 18S
28-SEP-2000
                     WO200056762-A2
                                             Aspergillus niger
                                                                    metabolic pathway
                                                                                                                   Multiple gene expression; filamentous fungal cell;
                                                                                                                                            Aspergillus niger EST SEQ ID NO:4068.
                                                                                                                                                                    13-MAR-2001
                                                                                                                                                                                           AAF11545;
                                                                                                                                                                                                                 AAF11545
                                                                                                                                                                                                                                                                                                                                                                             Sequence
                                                                                                                                                                                                                                                                                                                                                                                                   in order
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Disclosure;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      WPI; 1994-264577/33.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Lalonde M,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    (SIMO/) SIMON
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             23-DEC-1992;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    23-DEC-1992;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            24-JUN-1994
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    misc_difference
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Key
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Endogone pisiformis
                                                                                                                                                                                                                                                                                                                                          Local
                                                                                                                                                                                                                                                                               62
                                                                                                                                                                                                                                                                                           1 DTATTAGCTCTAGAATTACCACGGGTATCCAAGTAGTAAGG
                                                                                                                                                                                                                                                                                                                             38;
                                                                                                                                                                                                                                                                                                                                        Similarity
                                                                                                                                                                                                                   standard;
                                                                                                                                                                                                                                                                              GTATTAGCTCTAGAATTACCACGGTTATCCAAGTAGTAAAG
                                                                                                                                                                                                                                                                                                                                                                            447 BP; 133
                                                                                                                                                                                                                                                                                                                                                                                                   to design taxon specific primers/probes.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             endomycorrhizal
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Page
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ribosomal
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Simon
                                                                                                                                                                                                                                                                                                                             Conservative
                                                                                                                                                                   (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            92CA-2086136
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    92CA-2086136
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           /note- "bases not determined"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       /*tag=
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        20; 40pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ŗ,
                                                                    engineering;
                                                                                                                                                                                                                   cDNA;
                                                                                                                                                                                                                                                                                                                                       90.2%;
92.7%;
                                                                                                                                                                                                                                                                                                                                                                            A; 77 C;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             gene; SSU; probe; primer;
hizal fungi; plant; root;
                                                                                                                                                                                                                   568
                                                                                                                                                                                                                                                                                                                            Score 37; DB
Pred. No. 4.5e
1; Mismatches
                                                                                                                                                                                                                                                                                                                             1:
                                                                                                                                                                                                                 ВP
                                                                                                                                                                                                                                                                                                                                                                            100 G; 117 T;
                                                                     catabolic
                                                                                                                                                                                                                                                                                                                       DB 15,
4.5e-06;
2;
                                                                    spore morphogenesis;
pathway engineering;
                                                                                                                                                                                                                                                                                                                                                                            20 other;
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                                                                                                                                                                                                                                                                                                                                                    Length 447
                                                                                                                                                                                                                                                                                                                             Indels
                                                                                                                                                                                                                                                                             22
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              of
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              arbuscular
                                                                                           recombination;
                                                                                                                                                                                                                                                                                                                            <u>;</u>
                                                                     88
                                                                                                                                                                                                                                                                                                                            Gaps
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22-MAR-2000; 2000WO-US07781.

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RESULT 12
AAZ00859/c
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Query Match
Best Local
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Matches
16-FEB-1998;
                                16-FEB-1998;
                                                                 19-AUG-1999
                                                                                                      DE19806274-A1
                                                                                                                                     Aspergillus fumigatus
                                                                                                                                                                                   Detection; diagnosis; 18S rRNA; aspergillosis; oncology;
                                                                                                                                                                                                                         A. fumigatus 18S rRNA DNA
                                                                                                                                                                                                                                                                11-OCT-1999
                                                                                                                                                                                                                                                                                                  AAZ00859;
                                                                                                                                                                                                                                                                                                                                   AAZ00859 standard;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Sequence 568 BP; 155 A; 116 C; 141 G; 150 T; 6 other;
                                                                                                                                                                        invasive infection; haematology;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Monitoring differential expression of genes in filamentous fungal cells uses fluorescence-labeled nucleic acids isolated from the cells and a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Claim 87; Page 1791-1792; 3161pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       substrate of expressed sequence tags -
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Berka RM, Rey MW,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     22-MAR-1999;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             (NOVO ) NOVO NORDISK BIOTECH INC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             OCAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              specifically claimed in the present invention.
                                                                                                                                                                                                                                                                                                                                                                                                                         157
                                                                                                                                                                                                                                                                                                                                                                                                                                        1 DTATTAGCTCTAGAATTACCACGGGTATCCAAGTAGTAAGG 41
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             38;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                      GTATTAGCTCTAGAATTACCACAGGTATCCATGTAGTAAGG 117
                                                                                                                                                                                                                                                            (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Conservative
98DE-1006274
                                98DE-1006274
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                                                                                                                                                                                                                                                                                                                                   DNA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Shuster JR,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        90.2%;
                                                                                                                                                                                                                                                                                                                                   1733
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                                                                                                                                                                                                                                                                                                                                 ВP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Score 37; DB 21;
Pred. No. 4.6e-06;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Kauppinen S,
                                                                                                                                                                    immune system suppression;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         'n
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Clausen IG,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Length 568;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       0
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Gaps
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RESULT 13
ABA01152/c
ID ABA01
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Best Local
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                                                                                                                             WPI; 2002-002933/01
                                                                                                                                                                                                                                     27-DEC-1999;
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(HEHL/)
(SKLA/)
                                                                                                                                                                      (TAKE-) TAKEHARA KAGAKU KOGYO KK
(OSAQ ) OSAKA CITY.
                                                                                                                                                                                                                                                                                 26-DEC-2000; 2000JP-0394766
                                                                                                                                                                                                                                                                                                                            11-SEP-2001.
                                                                                                                                                                                                                                                                                                                                                                       JP2001245657-A
                                                                                                                                                                                                                                                                                                                                                                                                              Deuteromycetes sp
                                                                                                                                                                                                                                                                                                                                                                                                                                                         Aldonic acid;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Deuteromycetes polynucleotide SEQ ID
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               24-JAN-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ABA01152;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ABA01152 standard; DNA; 1745
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Sequence 1733 BP; 446 A; 374 C; 475 G; 438 T; 0 other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Claim
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Detecting Aspergillus nucleic acid in body samples by two-step polymerase chain reaction, for diagnosing aspergillosis
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       WPI; 1999-470047/40
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Buchheidt D,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        132 GTATTAGCTCTAGAATTACCACAGGTATCCATGTAGTAAGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              2; Fig 1; 16pp;
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) HEHLMANN R.
) SKLADNY H.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Similarity
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        (first entry)
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92.7%;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ВP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Score 37; I
Pred. No. 5.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Mismatches
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hes 2; Indels
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A new microbe for producing aldonic acid, comprises a new strain Acinetobacter or Burkholderis -

of.

Disclosure; Page 17;

22pp; Japanese

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ARESULT 15
AAV54086/c
ID AAV540
XX AAV540
AC AAV540
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DT 04-DEC
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                                                                                                                                                                                                                                                                This is the nucleotide sequence of the Pythium spinosum OPA-1 in the method of the invention where novel probes are used for detection and identification of a fungus of Pythium genus.
       Nucleotide sequence of pythium myritylum KPMS.
                                                              AAV54086;
                                     04-DEC-1998
                                                                                    AAV54086 standard;
                                                                                                                                                                                                                                          Sequence 1821 BP; 460 A; 329 C; 466 G; 518 T; 48 other;
                                                                                                                                                                                                                                                                                                                    Disclosure; Page 9; 22pp; Japanese.
                                                                                                                                                                                                                                                                                                                                            New oligo-nucleotide probe - for rapid and precise detection and identification of Pythium genus fungus {\bf r}
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Pythium spinosum
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            KPMS; probe;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Sequence 1745 BP; 448 A; 382 C; 465 G; 450 T; 0 other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            The present invention relates to a new microbe of Acinetobacter or Burkholderis genus producing aldonic acid and oxidising specifically the hemiacetal hydroxy group of a saccharide having said hydroxy group. Aldonic acid is used as a mineral reinforcing agent. The present sequence was used to illustrate the present invention.
                                                                                                                                                                                                                                                                                                                                                                                    WPI; 1998-535049/46.
                                                                                                                                                                                                                                                                                                                                                                                                          (SHIN-) SHINKINRUI KINO KAIHATSU KENKYUSHO
                                                                                                                                                                                                                                                                                                                                                                                                                                     28-FEB-1997;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Nucleotide sequence of pythium spinosum OPA-1.
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                                   (first entry)
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                                                                                                                 This is the nucleotide sequence of the Pythium myriotylum KPMS used in the method of the invention where novel probes are used for the detection and identification of a fungus of Pythium genus.
                                                                                               Sequence 1840 BP; 481 A; 350 C; 472 G;
                                                                                                                                                                     Disclosure; Page 8; 22pp; Japanese
                                                                                                                                                                                            New oligo-nucleotide probe - for rapid identification of Pythium genus fungus
                                                                                                                                                                                                                                   WPI; 1998-535049/46.
                                                                                                                                                                                                                                                                                                                                                            JP10234399-A
                                                                                                                                                                                                                                                        (SHIN-) SHINKINRUI KINO KAIHATSU KENKYUSHO
                                                                                                                                                                                                                                                                                                           28-FEB-1997;
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                                                                                                                                                                                                                                                                                                                                                                                Pythium myriotylum
                                                                                                                                                                                                                                                                                                                                                                                                      KPMS; probe; hybridisation; fungus; ss.
169 GTATTAGCTCTAGAATTACTACGGTTATCCAAGTAGTAAGG 129
              DTATTAGCTCTAGAATTACCACGGGTATCCAAGTAGTAAGG 41
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1; Mismatches 2;
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Search completed: June 12, Job time: 211.995 secs 2003, 01:44:08

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Post-processing: Minimum Match 0%
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atch cal s	NUMBER OF SEQUIL CORRESPONDENCE ADDRESSE: 1 STREET: 611 CITY: LOS AL STATE: CALL: COUNTRY: US. ZIP: 90017 COMPUTER READAL MEDIUM TYPE: COMPUTER: II OPERATING SY. SOFTWARE: WA CURRENT APPLICAT APPLICATION PILICAT PRIOR APPLICATION FILING DATE: CLASSIFICATION PRIOR APPLICATION FILING DATE: APPLICATION FILING DATE: ATTORNEY/AGENT NAME: WAYDU REGISTRATION REFERENCE/DO TELECOMMUNICAT TELEPHONE: TELEFAX: (2 TELEFAX: (3 TELEFAX: 40 TYPE: NUCLE STRANDEDWESS TOPOLOGY: 1	587A 2, 0.5 INF CANT	00000000000000000000000000000000000000
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y	MERG OF ENVENION: 10 HISTORIA MERG OF SEQUENCES: 3 RRESPONDENCE ADDRESS: 3 RRESPONDENCE ADDRESS: 3 RDDRESSEE: Lyon & Lyon STREET: 611 West Sixth Street CITY: California COUNTRY: USA COUNTRY: USA COUNTRY: USA COMPUTER READABLE FORM: MEDIUM TYPE: 3.5" Diskette, COMPUTER: IBM PS/2 Model 50Z COMPUTER: IBM PS/2 MODENATING SYSTEM: IBM P.C. DO SOFTWARE: WOO'GPECT IN DATA: RPPLICATION DATA: RPPLICATION DATA: IOR APPLICATION DATA: IOR APPLICATION DATA: IOR APPLICATION DATA: IOR APPLICATION NUMBER: 05/07/72 REGISTRATION NUMBER: 32,327 REGISTRATION FOR SEQ ID NO: 2: COUNTY CALL OF SEQ ID NO: 2: COUNTY CHARACTERISTICS: LENGTH: 40 TYPE: MUCLEIC ACID STRANDEDNESS: Single TOPOLOGY: linear 720-587A-2	zzr. b	1747 1747 1747 1749 1749 1749 1749 1749
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US-08-093-144-4/c
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                                                                                                                                 Sequence 1, Application US/08867820A Patent No. 5891685 GENERAL INFORMATION:
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Best Local Similarity
                                                                                                                                                                                                                                                                                                       Matches
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SOFTMARE: Patentin Release #1.0, V.
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/007
CLASSTETCH
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TELEX: 6714627 CUSH
INFORMATION FOR SEQ ID NO: 4
SEQUENCE CHARACTERISTICS:
                                                           APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        REFERENCE/DOCKET NUMBER: LAH/3122/92223/MJW TELECOMMUNICATION INFORMATION: TELEPHONE: (202) 861-3000
         TITLE OF INVENTION: METHOD FOR PRODUCING ESTER OF (S)-
NUMBER OF SEQUENCES: 57
                                              APPLICANT:
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APPLICATION NUMBER: US 07/745,192
FILING DATE: 15-AUG-1991
ATTORNEY/AGENT INFORMATION:
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CORRESPONDENCE ADDRESS:
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TITLE OF INVENTION: DNA PROBES FOR THE DETECTION OF
TITLE OF INVENTION: ARBUSCULAR ENDOMYCORRHIZAL FUNGI
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       NUMBER OF SEQUENCES: 2
CORRESPONDENCE ADDRESS:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   NAME: Hymo, Lawrence A. REGISTRATION NUMBER: 19,057
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DEDNESS: double
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UEDA Makoto
                                                                                     MIKAWA Takashi
                                                                                                    YAMAGISHI Masahiro
TAKAI Yukie
                                          OHARA Akiko
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                          -HYDROXYBUTY
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; SOFTWARE: PatentIn version 3.
; SEQ ID NO 1
; LENGTH: 2293
; TYPE: DNA
; ORGANISM: Gibberella fujikuroi
US-09-645-073-1
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                                                                   Matches
                                                                                               Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Query Match
Best Local :
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                                                                                                                                                                                                                                                                                                                                                                                         Sequence 1, Application US/09645073
Patent No. 6287800
                                                                                                                                                                                                                                           CURRENT APPLICATION NUMBER: US/09/645,073
CURRENT FILING DATE: 2000-08-25
PRIOR APPLICATION NUMBER: US 60/151,770
PRIOR FILING DATE: 1999-08-31
                                                                                                                                                                                                                                                                                                                         APPLICANT: Lee, May
APPLICANT: Galazzo, Jorge
TITLE OF INVENTION: Prod
                                                                                                                                                                                                                                 NUMBER OF SEQ ID NOS:
                                                                                                                                                                                                                                                                                                                FILE REFERENCE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TELEFAX: 202-721-8250
INFORMATION FOR SEQ ID NO:
SEQUENCE CHARACTERISTICS:
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TELECOMMUNICATION INFORMATION:
TELEPHONE: 202-721-8200
TELEFAX: 202-721-8250
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ORIGINAL SOURCE:
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NAME: Lee Cheng
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        SOFTWARE: Wordperfect 5.1 CURRENT APPLICATION DATA:
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                                                                                    Local
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 STRANDEDNESS:
TOPOLOGY: 11
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         APPLICATION NUMBER: US/08/867,820A FILING DATE: June 3, 1997 CLASSIFICATION: 435
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   COMPUTER: IBM PC compatibl
OPERATING SYSTEM: PC-DOS/M
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ADDRESSEE: WENDEROTH, LIND & PONACK, L.L.P. STREET: 2033 K Street, N.W., Suite 800 CITY: Washington, D.C.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             REGISTRATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      COUNTRY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      MEDIUM TYPE:
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170 GTATTAGCTCTAGAATTACCACGGTTATCCAAGTAGTAAGG
                            1 DTATTAGCTCTAGAATTACCACGGGTATCCAAGTAGTAAGG 41
                                                                   39;
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39; Conservative
                                                                                Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             nucleic acid
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                                                                                                                                                                                                               PatentIn version 3.0
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                                                                               94.1%;
95.1%;
                                                                                                                                                                                                                                                                                                                         Production of High Titers of Gibberellins GA4 and GA7
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                                                                             Score 38.6; DB 4;
Pred. No. 2.3e-07;
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Pred. No. 2.2e-07;
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                                                              Mismatches
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                                                                                            Length 2293;
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US-08-093-144-6/c

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US-08-093-144-6
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                                                                                                                                                                                                                                                                                                                                                                                                                                         Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TELEFAX: (202) 822-0944
TELEX: 6714627 CUSH
INFORMATION FOR SEQ ID NO:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     GENERAL INFORMATION:
                                                                                                                                                                                                                                                    atent No. 5434048 GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          APPLICANT: SIMON, LUC
APPLICANT: LALONDE, MURICE
TITLE OF INVENTION: DNA PROBES FOR THE DETECTION OF
TITLE OF INVENTION: ARBUSCULAR ENDOMYCORRHIZAL FUNGI
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         SOFTWARE: PatentIn Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/093,144
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               COMPUTER READABLE FORM:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           REGISTRATION NUMBER: 19,057
REFERENCE/POCKET NUMBER: 14
TELECOMMUNICATION INFORMATION:
TELEPHONE: (202) 861-3000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          PRIOR APPLICATION DATA:
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CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ATTORNEY/AGENT INFORMATION:
COMPUTER READABLE FORM:
MEDIUM TYPE: Tape
COMPUTER: IBM PC compatible
                                                                                                                                                     CORRESPONDENCE ADDRESS:
                                                                                                                                                                                        TITLE OF INVENTION:
                                                                                                                                                                                                                    APPLICANT: SIMON, LUC
APPLICANT: LALONDE, MAURICE
                                                                                                                                                                     NUMBER OF SEQUENCES:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            COMPUTER: IBM PC compatible OPERATING SYSTEM: PC-DOS/MS-DOS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 COUNTRY: U.S.A. ZIP: 20036-5601
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         LENGTH: 444 base pairs
TYPE: nucleic acid
STRANDEDNESS: double
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               MEDIUM TYPE: Tape
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              APPLICATION NUMBER: US (FILING DATE: 15-AUG-1991
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CLASSIFICATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ADDRESSEE:
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                                                                                                                     STREET:
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                                                                                                                                       ADDRESSEE:
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5. 5434048
                                                                                                                                                                                                                                                                                                                                                                         62 GTATTAGCTCTAGAATTACCACGGTTATCCAAGTAGTAAAG 22
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                                                                                                                                                                                                                                                                                                                                                                                                                                                        Similarity
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                                                        20036-5601
                                                                                                    Washington
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                                                                                    D.C.
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                                                                                                                       Eleventh Floor,
                                                                      U.S.A.
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                                                                                                                                       CUSHMAN,
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                                                                                                                                                                                        DNA PROBES FOR THE DETECTION OF ARBUSCULAR ENDOMYCORRHIZAL FUNG:
                                                                                                                                                                                                                                                                                                                                                                                                                                                        90.2%;
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                                                                                                                                       DARBY & CUSHMAN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              6:
                                                                                                                       1615
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Pred. No. 8.5e-07;
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                                                                                                                       Street, N.W
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TELEFAX: (202) 822-0944
TELEX: 6714627 CUSH
INFORMATION FOR SEQ ID NO: SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             SOFTWARE: Patentin Release #1.0, Version #1.25 CURRENT APPLICATION DATA:
                                                                                                                                                                            COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
COMPUTER: DAMPORED POSSUB-
CORRATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0,
CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       REFERENCE/DOCKET NUMBER: LA TELECOMMUNICATION INFORMATION: TELEPHONE: (202) 861-3000
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                                                                                                                                                                                                                                                                                                                                                                                      CORRESPONDENCE ADDRESS
                                                                                                                                                                                                                                                                                                                                                                                                                      TITLE OF INVENTION: GENOMIC DNA SEQUENCES OF ASHBYA GOSSYPII TITLE OF INVENTION: AND USES THEREOF
                                                            APPLICATION NUMBER: CH 0016/97 FILING DATE: 31-DEC-1996 ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                         NUMBER OF SEQUENCES:
                                                                                                                                                                                                                                                                                                                                                                                                                                                             APPLICANT:
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                                                                                                                PRIOR APPLICATION DATA:
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TELECOMMUNICATION INFORMATION:
                                                                                                                                                                                                                                                                                    STREET: 300-
CITY: Research Triang.c
CTATE: No. 6239264th Carolina
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       STRANDEDNESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              APPLICATION NUMBER: US 07/745,192 FILING DATE: 15-AUG-1991
                                                                                                                                APPLICATION NUMBER: FILING DATE: 24-DECLASSIFICATION: 43
                                                                                                                                                                                                                                                                                                                         Local
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TOPOLOGY:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ENGTH:
                              NAME: Meigs, J. Timothy REGISTRATION NUMBER: 38
                 REFERENCE/DOCKET NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             INFORMATION:
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Steiner, Sabine
Mohr, Christine
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Conservative
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Knechtle, Philipp
                                                                                                                                                                                                                                                                                                                                                                                                                                                        Rebischung, Corinne
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Philippsen, Peter
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                                                                                                                                         омыек: US/08/998,416
24-DEC-1997
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94.9%;
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                              38,241
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                PF/5-30306/A/CGC1976
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Score 36.6; DB 1;
Pred. No. 1.3e-06;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Mismatches
                                                                                                                                                                                                   Version #1.30
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       DB 1;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Query Match
Best Local Similarity 8/...
36; Conservative
                                                                                                      TELEPHONE: 919-541-858
TELEFAX: 919-541-8689
INFORMATION FOR SEQ ID NO:
SEQUENCE CHARACTERISTICS:
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TELEFAX: 919-541-8689
INFORMATION FOR SEQ ID NO:
                                                                                                                                                                                                                                                                         COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/998.416
FILING DATE: 24-DEC-1997
CLASSIFICATION: 435
PRIOR APPLICATION DATA:
PRIOR APPLICATION DATA:
PRIOR APPLICATION DATA:
                                                                                                                                           REFERENCE/DOCKET NUMBER: 9E/
TELECOMMUNICATION INFORMATION:
TELEPHONE: 919-541-8587
TELEPAX: 919-541-
                                                                                                                                                                                                     APPLICATION NUMBER: CH 00 FILING DATE: 31-DEC-1996 ATTORNEY/AGENT INFORMATION: NAME: Me198, J. Tinothy REGISTRATION NUMBER: 38,2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 APPLICANT:
APPLICANT:
APPLICANT:
                MOLECULE TYPE:
ORIGINAL SOURCE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                 COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        APPLICANT: Rebischung, Corinne
TITLE OF INVENTION: GENOMIC DNA SEQUENCES OF ASHBYA GOSSYPII
TITLE OF INVENTION: AND USES THEREOF
NUMBER OF SEQUENCES: 1152
CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ORIGINAL SOURCE:
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                                                 TOPOLOGY:
                                                             STRANDEDNESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 COUNTRY:
                                                                                              LENGTH:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                  27709
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Research Triangle Park
: No. 6239264th Carolina
RY: USA
                                                                        nucleic acid
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nucleic acid
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Steiner, Sabine
Mohr, Christine
PAG1518UP
                                                linear
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Knechtle, Philipp
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                            DNA (genomic)
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                                                           single
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                                                                                                                                                                                         PF/5-30306/A/CGC1976
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Pred. No. 2e-05;
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Matches
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Best Local Similarity
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TELEFAX: 919-541-8689
INFORMATION FOR SEQ ID NO:
                                                                                                                                                                                                                                                                                                                                                         APPLICATION NUMBER: CH 001
FILING DATE: 31-DEC-1996
ATTORNEY_AGENT INFORMATION:
NAME: Me19s, J. Timothy
REGISTRATION NUMBER: 38, 24
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                                                                                                                                                                 TOPOLOGY: linear MOLECULE TYPE: DNA ORIGINAL SOURCE:
                                                                                                                                                                                                                                                                                                REFERENCE/DOCKET NUMBER: 38,241
TELECOMMUNICATION INFORMATION:
TELEPHONE: 919-541-8897
TELEFAX: 919-641-8897
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      SOFTWARE: Patentin Release #1.0, Version #1.30 CURRENT APPLICATION DATA: APPLICATION NUMBER: US/08/998,416 FILING DATE: 24-DEC-1997
                                                                                                                                                                                                                                                                                                                                                                                                                                             CLASSIFICATION: 435
PRIOR APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  APPLICANT: Wendland, Jurgen
APPLICANT: Knechtle, Philipp
APPLICANT: Rebischung, Corinne
TITLE OF INVENTION: GENOMIC DNA SEQUENCES OF ASHBYA GOSSYPII
TITLE OF INVENTION: AND USES THEREOF
NUMBER OF SEQUENCES: 1152
CORRESPONDENCE ADDRESS:
CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                 SEQUENCE CHARACTERISTICS
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                                                                                    Local Similarity
                                                                                                                                                   ORGANISM: PAG1567UP
                                                                                                                                                                                                                  STRANDEDNESS:
                                                                                                                                                                                                                                   TYPE: nucleic
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OPERATING SYSTEM: PC-DOS/MS-DOS
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         STREET:
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674 GTATTAGCTCTAGAATTACCACAGATATCCATGTAGTAAAG 634
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                      1 DTATTAGCTCTAGAATTACCACGGGTATCCAAGTAGTAAGG 41 :|||||||||||||||
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T: 3054 Cornwallis Road
Research Triangle Park
: No. 6239264th Carolina
                                                                                                                                                                                                                               712 base pairs
ucleic acid
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                                                                     Conservative
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Steiner, Sabine
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                                                                                                                                                                                  DNA (genomic)
                                                                                                                                                                                                                  single
                                                                                   82.4%;
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87.8%;
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                                                                  Score 33.8; D
Pred. No. 2e-0
1; Mismatches
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                                                                                   2e-05;
                                                                                             DB 4; Length 712;
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RESULT 10 US-08-998-416-602/c

NUMBER OF SEQUENCES:

1152

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RESULT 11
US-08-998-416-952; Sequence 952; A
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Best Local Similarity
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                                                                                                                                                                Patent No.
                                                                                                                                               GENERAL INFORMATION:
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                                                                                              APPLICANT:
APPLICANT:
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                                                                                                                                                                                                                                                                                                                                                                                                                            MOLECULE TYPE:
ORIGINAL SOURCE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              PRIOR APPLICATION DATA:
APPLICATION NUMBER: CH 0
FILING DATE: 31-DEC-1996
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MEDIUM TYPE: Floppy disk
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               SEQUENCE CHARACTERISTICS:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               NAME: Meigs, J. Timothy REGISTRATION NUMBER: 38
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ENGTH:
                                                                                                                                                                                                                                                                674 GTATTAGCTCTAGAATTACCACAGATATCCATGTAGTAAAG 634
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5. 6239264
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                                                                                                                                                                                                                                                                                             1 DTATTAGCTCTAGAATTACCACGGGTATCCAAGTAGTAAGG 41
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No. 6239264th Carolina
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        : 717 base pairs nucleic acid
                                                                                                                                                                                Application US/08998416
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Steiner, Sabine
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Knechtle, Philipp
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                                                                                                                                                                                                                                                                                                                                Conservative
Rebischung, Corinne
TENTION: GENOMIC DNA SEQUENCES OF ASHBYA GOSSYPII
TENTION: AND USES THEREOF
                                                                                               Pohlmann, Rainer
Steiner, Sabine
                                                                                  Mohr, Christine
                                                                                                                                Philippsen, Peter
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           PatentIn Release #1.0, Version #1.30
                                               Wendland, Jurgen
Knechtle, Philipp
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SYSTEM: PC-DOS/MS-DOS
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87.8%;
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                                                                                                                                                                                                                                                                                                                                Mismatches
                                                                                                                                                                                                                                                                                                                                                             DB 4;
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US-08-327-516-1/c
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Query Match
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Matches
                                                                                                                                                                                                                                                                                                                                                             GENERAL INFORMATION:
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TELEFAX: 919-541-8689
INFORMATION FOR SEQ ID NO:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         REFERENCE/DOCKET NUMBER: PETELECOMMUNICATION INFORMATION: 919-541-8587
                                                                                                  ZIP: 94105-1493
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
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ORIGINAL SOURCE:
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NAME: Meigs, J. Timothy
REGISTRATION NUMBER: 38,;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               CLASSIFICATION: 435
PRIOR APPLICATION DATA:
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/0
FILING DATE: 20-OCT-1994
                                                                                                                                                                                                                                      NUMBER OF SEQUENCES: 8
CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       SEQUENCE CHARACTERISTICS
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                                                                                                                                                                                                                                                                                                                      APPLICANT: CONRAL APPLICANT: BARR,
                                                                                                                                                                                                                                                                         TITLE OF INVENTION:
                                                                                                                                                                                                                                                                                           APPLICANT:
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OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.30
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TOPOLOGY:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   APPLICATION NUMBER:
                                                                COMPUTER: IBM PC compatible OPERATING SYSTEM: PC-DOS/MS-DOS
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                                                                                                                                                                                                                       ADDRESSEE:
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Research Triangle Park
: No. 6239264th Carolina
                                                                                                                                                                                       San Francisco
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   nucleic acid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 GTATTAGCTCTAGAATTACCACAGATATCCATGTAGTAAAG 550
                                                                                                                                                                     California
                                                                                                                                                                                                    E: Townsend and Townsend Khourie and Crew
Steuart Street Tower, One Market Plaza
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     723 base pairs
                                                                                                                                                                                                                                                                                                                                         CONRAD, Patricia A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Conservative
                                                                                                                                                                                                                                                                                                           ANDERSON, Mark L.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       PAG1588UP
                                                 PatentIn Release #1.0, Version #1.25
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                                                                                                                                                                                                                                                                                                                         Bradd
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87.8%;
                                                                                                                                                                                                                                                                         Bovine Neospora Isolates and Their Uses
                                                                                                                                                                                                                                                                                             Karen W.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               US/08/998,416
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              us/08/327,516
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Score 33.8; DB Pred. No. 2e-05;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   DB 4; Length 723;
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PRIOR APPLICATION DATA:

CLASSIFICATION:

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Query Match
Best Local Similarity
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                                                                                                                                                                  RESULT 14
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US-09-281-766-1/c
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                                                                                                           Sequence 1, Applic
Patent No. 6063604
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Matches
Patent No.
                         GENERAL INFORMATION:

APPLICANT: Wilk, James F.

APPLICANT: Mueller, Reinhold

APPLICANT: Blassak, Michele

APPLICANT: Wilkosz, Richard i
                                                                                                                                                                                                                                                                                                                                                OTHER INFORMATION: nuclear small subunit (nss)-rRNA gene -09-281-766-1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Sequence 1, Application US/09281766 Patent No. 6376196
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                              SOFTWARE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    APPLICANT: Conrad, Patricia C.
APPLICANT: Louie, Kitland
APPLICANT: The Regents of the University of California
TITLE OF INVENTION: Recombinant Neospora Antigens and T
FILE REFERENCE: 023070-082510US
CURRENT APPLICATION NUMBER: US/09/281,766
CURRENT FILING DATE: 1999-03-30
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TELEFAX: (415) 543-5043
INFORMATION FOR SEQ ID NO: :
SEQUENCE CHARACTERISTICS:
LENGTH: 1747 base pairs
TYPE: nucleic acid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          PRIOR APPLICATION NUMBER: US PRIOR FILING DATE: 1996-05-10
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              NUMBER OF SEQ ID NOS:
                                                                                                                                                                                                                                                                                                                                                                               FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                           TYPE: DNA
ORGANISM: Neospora sp.
               TITLE OF INVENTION:
                                                                                                                                                                                                                                                                                                                                                                                                                               LENGTH: 1747
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  REFERENCE/DOCKET NUMBER: 231
TELECOMMUNICATION INFORMATION:
TELEPHONE: (415) 543-9600
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   MOLECULE TYPE: DNA (genomic)
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mes 35; Conserv
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TOPOLOGY: 11
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     APPLICATION NUMBER: FILING DATE: 21-MA
                                                                                                                                                                                                           147 GTATTAGCCATAGAATTACCACGGTTATCCATGTAGTAAAG 107
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                                                                                                                              Application US/08949770
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Bastian, Kevin L
                                                                                                                                                                                                                                                                               Conservative
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                              Michele
Richard K.
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                                                                                                                                                                                                                                                                                              78.5%;
          Target Nucleic Acid Sequence Amplification
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Pred. No. 0.00011;
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Pred. No. 0.
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RESULT 15
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; OTHER INFORMATION: /= "18s rRNA gene of Cryptosporidium;

; OTHER INFORMATION: parvum"

US-08-949-770-1
                                                                                                                                                                                                                                                                                                               Patent No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Matches
                                                                                                                                                                                                                                                                                                                            Sequence 281,
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Best Local Similarity
                                                                                                                                                                                                                                                                                                GENERAL INFORMATION:
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INFORMATION FOR SEQ ID NO: 1
SEQUENCE CHARACTERISTICS:
LENGTH: 1750 base pairs
                                                                                                                              APPLICANT: Rebischung, Corinne
TITLE OF INVENTION: GENOMIC DNA SEQUENCES
TITLE OF INVENTION: AND USES THEREOF
NUMBER OF SEQUENCES: 1152
                                                                                                CORRESPONDENCE ADDRESS: ADDRESSEE: No. 62392
COMPUTER READABLE FORM:
                                                                                                                                                                                                 APPLICANT:
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PRIOR APPLICATION NUMBER: (
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          MEDIUM TYPE: Floppy
                                                                                                                                                                                                                                APPLICANT:
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                                COUNTRY:
                                                    STATE:
                                                                   CITY:
                                                                                STREET:
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TOPOLOGY: lin
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            APPLICATION NUMBER:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CITY: Chicago
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                                                                                                                                                                                                                                                                                                                                                                                                        170 GTATTAGCTCTAGAATTACCACGGTTATCCATGTA 136
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                                             Research Triangle Park
No. 6239264th Carolina
                    27709
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                                                                             3054 Cornwallis Road
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                                USA
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                                                                                                                                                                                                                                                                                                                            Application US/08998416
                                                                                                                                                                                           Wendland, Jurgen
Knechtle, Philipp
                                                                                                                                                                                                                           Mohr, Christine
                                                                                                                                                                                                                                             Pohlmann, Raines
Steiner, Sabine
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                                                                                            6239264artis Corporation
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91.4%;
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ower, 233 South Wacker Drive
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                28003/33045
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Pred. No. 0.00034;
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                                                                                                                                                            OF ASHBYA GOSSYPII
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MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/8/998,416
FILING DATE: 24-DEC-1997
CLASSIFICATION: 435
PRIOR APPLICATION NUMBER: UB/8/97
FILING DATE: 31-DEC-1996
ATTORNEY/AGENT INFORMATION:
NAME: Me19s, J. Timothy
RESISTRATION NUMBER: BF/5-30306/A/CGC1976
FILING-DATE: 31-DEC-1996
ATTORNEY/AGENT INFORMATION:
REFERENCE/DOCKET NUMBER: BF/5-30306/A/CGC1976
FILEPAX: 919-541-8669
INFORMATION FOR SEQ ID NO: 281:
SEQUENCE CHARACTERISTICS:
LENGTH: 709 base pairs
TYPE: nucleic acid
STRANDENNESS: single
TOPOLOGY: linear
MOLECULE TYPE: DATA
Genomic)
ORIGINAL SOURCE:
ORIGINAL
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Run
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Maximum Match 100%
Listing first 45 summaries
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41
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Match
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  Published_Applications_NA: *
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/cgn2_6/ptodata/2/pubpna/PCT_NEW_PUB.seq:*
/cgn2_6/ptodata/2/pubpna/US06_NEW_PUB.seq:*
/cgn2_6/ptodata/2/pubpna/US06_PUBCOMB.seq:*
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US-09-960-352-986
US-09-764-877-829
US-10-198-846-9359
US-09-960-352-9712
US-09-918-995-16742
US-09-918-846-6323
US-09-919-344-14
US-09-919-344-14
US-09-764-891-8902
US-09-764-891-10043
US-09-799-462A-16
US-09-799-462A-16
US-09-799-462A-16
US-09-836-911A-16
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US-09-918-995-37407
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US-09-925-299-402
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Sequence 17, Appl
Sequence 402, App
Sequence 407, App
Sequence 137, App
Sequence 37407, A
Sequence 986, App
Sequence 9359, App
Sequence 9359, App
Sequence 61742, A
Sequence 61742, A
Sequence 16, Appl
Sequence 10043, Ap
Sequence 5, Appl
Sequence 16, Appl
Sequence 16, Appl
Sequence 5, Appl
Sequence 5, Appl
Sequence 16, Appl
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24.8	25	27.2	27.6	27.6	27.6	27.6	27.6	27.6	27.6	27.6	28.8	30.8	30.8	31	31.2	31.4	32.2	32.4	32.4	32.4	32.4	32.4	32.4	32.4	32.4
60.5	61.0	66.3	67.3	67.3	67.3	67.3	67.3	67.3	67.3	67.3	70.2	75.1	75.1	75.6	76.1	76.6	78.5	79.0	79.0	79.0	79.0	79.0	79.0	79.0	79.0
1170	261	696	32	32	32	32	32	32	32	32	173	1759	488	706	367	416	1747	42999	42999	42999	42999	42999	22118	22118	22118
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US-10-198-846-6851	US-09-867-701-2836	US-10-198-846-9414	US-09-954-586-41	US-09-954-586-37	US-09-954-586-33	US-09-954-586-29	US-09-954-695-41	US-09-954-695-37	US-09-954-695-33	US-09-954-695-29	US-09-960-352-2382	US-10-052-092-25	US-09-918-995-17863	US-09-910-943-263	US-09-960-352-8604	US-09-918-995-5393	US-09-957-995A-1	US-10-287-313-17	US-10-151-081-17	US-09-836-911A-17	US-10-125-767-17	US-09-799-462A-17	US-10-287-313-16	US-10-151-081-16	US-09-815-979-5
Sequence 6851, Ap	-	Sequence 9414, Ap		Sequence 37, Appl	•	Sequence 29, Appl	•	Sequence 37, Appl	Sequence 33, Appl	•	Sequence 2382, Ap	Sequence 25, Appl	Sequence 17863, A	Sequence 263, App	Sequence 8604, Ap	Sequence 5393, Ap	Sequence 1, Appli	Sequence 17, Appl	•	•	Sequence 5, Appli				

ALIGNMENTS

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APPLICANT: Coss, Cathleen A.
APPLICANT: Wright, Anita C.
FITTLE OF INVENTION: ASSAY for Perkinsus in Sherile Reference: 4115-137 CIP
CURRENT APPLICATION NUMBER: US/09/771,935B
CURRENT FILING DATE: 2001-01-30
PRIOR APPLICATION NUMBER: US 08/900,117
PRIOR FILING DATE: 1997-07-25
PRIOR FILING DATE: 1997-07-26
PRIOR FILING DATE: 1996-07-26
PRIOR FILING DATE: 1996-07-26
PRIOR FILING DATE: 1996-07-26
NUMBER OF SEQ ID NOS: 25
CONTWARDE: Detactin Version 3 1
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                                                                                                                                                                     US-09-771-935B-17
                                                                                                                                                                                                                                                                  SOFTWARE: PatentIn version 3.1
SEQ ID NO 17
LENGTH: 1808
TYPE: DNA
ORGANISM: Perkinsus sp.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Sequence 17, Application US/09771935B Patent No. US20020137917A1
                                                                                                     Query Match
Best Local 9
                                                                                   Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                APPLICANT: Vasta, Gerardo R. APPLICANT: Marsh, Adam G. APPLICANT: Fernandez-Robeld
                                                                                                                                                                                         NAME/KEY: misc_feature
LOCATION: (1)..(1808)
OTHER INFORMATION: A nucleotide sequence of the SSU rRNA of P. andrewsi
                                                                                                                                                                                                                                                       FEATURE:
  167
                                     1 DTATTAGCTCTAGAATTACCACGGGTATCCAAGTAGTAA 39
                                                                                 l Similarity
35; Conserv
Fernandez-Robeldo, Jose
                                                                                   Conservative
                                                                                                     81.5%;
                                                                                   Score 33.4; DB 10;
Pred. No. 0.00018;
1; Mismatches 3;
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                                                                                                                         Length 1808;
                                                                                        Indels
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                                                                                        Gaps
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RESULT 2 US-09-925-299-402/c ; Sequence 402, Application US/09925299

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FILE REFERENCE: PA102
CURRENT APPLICATION NUMBER: US/09/925,299
CURRENT APPLICATION NUMBER: US/09/925,299
CURRENT FILING DATE: 2001-08-10
PRIOR APPLICATION NUMBER: PCT/US00/05883
PRIOR FILING DATE: 2000-03-08
PRIOR APPLICATION NUMBER: 60/124,270
PRIOR FILING DATE: 1999-03-12
NUMBER OF SEQ ID NO.5: 1556
SOFTMARE: Patentin Ver. 2.0
SEQ ID NO. 402
LENGTH: 265
TYPE: DNA
ORGANATOR:
                                                                                                                                                                                                                                                                                                                                                                                                              US-09-925-299-402/c
; Sequence 402, Application US/09925299
; Patent No. US20020055627A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              밁
                                                                                                                                                SOFTWARE: PatentIn Ver. 2.0
SEQ ID NO 402
LENGTH: 265
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Best Local
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Matches
                                                                                                                                                                                                   CURRENT APPLICATION NUMBER: US/09/925,299
CURRENT FILLING DATE: 2001-08-10
PRIOR APPLICATION NUMBER: PCT/US00/05883
PRIOR FILING DATE: 2000-03-08
PRIOR PPLICATION NUMBER: 60/124,270
PRIOR FILING DATE: 1999-03-12
NUMBER OF SEQ ID NOS: 1556
                                                                                                                                                                                                                                                                                                                                        FILE REFERENCE: PA102
                                                                                                                                                                                                                                                                                                                                                      TITLE OF INVENTION:
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         NAME/KEY: misc_feature
LOCATION: (23)
OTHER INFORMATION: n equals a,t,g, or
NAME/KEY: misc_feature
                                                                                             TYPE: DNA
ORGANISM: Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     NAME/KEY: misc_feature
LOCATION: (255)
OTHER_INFORMATION: n equals a,t,g,
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LOCATION: (264)
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OTHER INFORMATION: n equals a,t,g,
NAME/KEY: misc_feature
LOCATION: (218)
OCATION: (213)
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OTHER INFORMATION: n equals a,t,g,
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OTHER INFORMATION: n equals a,t,g,
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LOCATION: (233)
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Conservative
                                                                                                                                                                                                                                                                                                                                                  Nucleic Acids, Proteins
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                79.0%;
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                                                                                                                 Sequence 37407, Application US/09918995

Publication No. US20030073623A1

GENERAL INFORMATION:

APPLICANT: HYSEG, Inc.

TITLE OF INVENTION: NOVEL NUCLEIC ACID SEQUENCES OBTAINED

TITLE OF INVENTION: FROM VARIOUS CDNA LIBRARIES

FILE REFERENCE: 20411-756

CURRENT APPLICATION NUMBER: US/09/918,995

CURRENT FILING DATE: 2001-07-30
             SOFTWARE: FastSEQ for Windows Version 3.0 SEQ ID NO 37407 LENGTH: 389
                                                                                                                                                                                                                                                                                                                                                                                                                                                       Query Match
Best Local 9
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SOFTWARE: FastSEQ for Windows Version 4.0
SEQ ID NO 137

LENGTH: 374
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                                                                                                                                                                                                                                                                                      -09-918-995-37407/c
                                                                PRIOR APPLICATION NUMBER: US/09/235,076
PRIOR FILING DATE: 1999-01-20
NUMBER OF SEQ ID NOS: 38054
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TITLE OF INVENTION: Compositions isolated from bovine TITLE OF INVENTION: mammary gland and methods for their use. FILE REFERENCE: 11000.1044c3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          LENGTH: 37
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           CURRENT APPLICATION NUMBER: US/10/079,623
CURRENT FILING DATE: 2002-02-19
TYPE: DNA
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           OTHER INFORMATION: n equals a,t,g, or NAME/KEY: misc_feature LOCATION: (264)
OTHER INFORMATION: n equals a,t,g, or
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     OTHER INFORMATION: n equals a,t,g, or
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OTHER INFORMATION: n equals a,t,g,
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                                                                                                                                                                                                                                                                                                                                                                                                                                ocal Similarity 89.9
                                                                                                                                                                                                                                                                                                                                                      138 GTATTAGCTCTAGAATTACCACAGTTATCCAAGTAGGA 101
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                162 GTATTAGCTCTAGAATTACCACAGTTATCCAAGTAGGA 125
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Molenaar, Adrian J.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Glenn, Matthew
Grigor, Murray R.
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89.5%;
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Pred. No. 0.00034;
1; Mismatches 3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Score 32.4; DB 10
Pred. No. 0.00032;
                                                                                                                                                                                                                                                                                                                                                                                                                                                              DB 9; Length 374;
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                                                                                                                        ; TYPE: DNA
; ORGANISM: Homo sapiens
US-09-764-877-829
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US-09-764-877-829
; Sequence 829, Application US/09764877
; Patent No. US20020147140A1
                                                                                                                                                                                                                               GENERAL INFORMATION:
APPLICANT: ROSEN et al.
TITLE OF INVENTION: Nucleic Acids, Proteins,
FILE REFERENCE: PC005
CURRENT APPLICATION NUMBER: US/09/764,877
CURRENT FILING DATE: 2001-01-17
                                                                                                                                                               Prior application data removed - refer to PALM or file wrapper NUMBER OF SEQ ID NOS: 4031
SOFTMARE: Patentin Ver. 2.0
SEQ ID NO 829
LENGTH: 395
                                                                      Matches
                                                                                                    Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               RESULT 6
US-09-960-352-986/c
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    SEQ ID NO 986
LENGTH: 395
TYPE: DNA
ORGANISM: Bos taurus
OTHER INFORMATION: Clone ID: 05-LIB2809-016-Q1-E1-B1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           APPLICANT: Byatt, John C.
APPLICANT: Mathialagan, Nagappan
TITLE OF INVENTION: NUCLEIC ACID AND OTHER MOLE
TITLE OF INVENTION: MUSCLE AND FAT DEPOSITION
FILE REFERENCE: 16511,006/37-21(10298)C
CURRENT APPLICATION NUMBER: US/09/980,352
NUMBER OF SEQ ID NOS: 15112
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Patent No. US20020
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Query Match
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                                                                                    TOCaT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               NAME/KEY: misc_feature LOCATION: (1)...(389)
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Local
                 127
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               1 DTATTAGCTCTAGAATTACCACGGGTATCCAAGTAGTA 38
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GTATTAGCTCTAGAATTACCACAGTTATCCAAGTAGGA 164
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    986,
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Similarity 89.5%;
                                                                 Conservative
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Conservative
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20020137139A1
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                                                                            79.0%;
89.5%;
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89.5%;
                                                        Score 32.4; DB 10;
Pred. No. 0.00035;
1; Mismatches 3;
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Pred. No. 0.00035;
1; Mismatches 3;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Score 32.4; DB 9;
Pred. No. 0.00035;
1; Mismatches 3
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                                                        Indels
                                                                                    Length 395;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Length 395;
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RESULT 10
US-09-918-995-16742/c
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SEQ ID NO 9712
LENGTH: 411
TYPE: DNA
ORGANISM: Bos taurus
OTHER IMPORMATION: Clone ID: 42-LIB2809-010-Q1-E1-C6
US-09-960-352-9712
                                                                                                                                                                                                                                                                                                                                                                                                Best Local
Matches 3
                                                          Sequence 16742, Application US/09918995
Publication No. US20030073623A1
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; ORGANISM: Homo sapiens
US-10-198-846-9359
APPLICANT: Hyseq, Inc.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Sequence 9712, Application US/09960352
Patent No. US20020137139A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             APPLICANT: Tao, Nengbing
APPLICANT: Byatt, John C.
APPLICANT: Byatt, John C.
APPLICANT: Mathialagan, Nagappan
TITLE OF INVENTION: WUCLEIC ACID AND OTHER MOLECULES ASSOCIATED WITH LACTATION
FILE REFERENCE: 16511.006/37-21(10298)C
CURRENT APPLICATION NUMBER: US/99/960,352
withdred of the work of
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Best Local :
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TITLE OF INVENTION: NOVEL GENES, COMPOSITIONS, KITS,
TITLE OF INVENTION: FOR IDENTIFICATION, ASSESSMENT,
TITLE OF INVENTION: THERAPY OF BREAST CANCER
TILE REFERENCE: MRI-049
CURRENT APPLICATION NUMBER: US/10/198,846
CURRENT FILLING DATE: 2002-07-18
CURRENT FILLING DATE: 2002-07-18
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APPLICANT: Xu, Yongyao
APPLICANT: Wang, Youzhen
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                                             INFORMATION:
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89.5%;
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Pred. No. 0.00035;
1; Mismatches 3; Indels 0
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Pred. No. 0.00035;
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FILE REFERENCE: 2041-756
CURRENT APPLICATION NUMBER: US/09/918,995
CURRENT FILING DATE: 2001-07-30
PRIOR APPLICATION NUMBER: US/09/235,076
PRIOR FILING DATE: 1999-01-20
PRIOR FILING DATE: 1999-01-20
PRIOR FILING DATE: 1999-01-30
PRIOR FILING DATE: 1999-01-30
SEQ ID NO 16742
LENGTH: 510
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LOCATION: (1)...(510)
OTHER INFORMATION: n = A,T,C or
US-09-918-995-16742
                                                                                                                                                                                                                                                                                                                                                                  PRIOR APPLICATION NUMBER: 60/306,220
PRIOR PILING DATE: 2001-07-18
NUMBER OF SEQ ID NOS: 14084
SOFTWARE: FastSEQ for Windows Version 4.0
SEQ ID NO 6323
LENGTH: 614
TYPE: DNA
ORGANISM: Homo sapiens
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                                                                                                                                                                                                                                                                                         NAME/KEY: misc_feature; LOCATION: 4, 540, 567, 594; OTHER INFORMATION: n = A,T,C or US-10-198-846-6323
                                                                                     RESULT 12
US-09-919-344-14/c
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       APPLICANT: Wang, Youzhen
APPLICANT: Steinmann, Kathleen
TITLE OF INVENTION: NOVEL GENES, COMPOSITIONS, KITS,
TITLE OF INVENTION: FOR IDENTIFICATION, ASSESSMENT,
TITLE OF INVENTION: THERAPY OF BREAST CANCER
FILE REFERENCE: MRI-049
Sequence 14, Application US/09919344
Patent NO. US20020137911A1
GENERAL INFORMATION:
APPLICANT: Pyle, Ruth A.
APPLICANT: Xu, Jiangchun
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Best Local S
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CURRENT FILING DATE: 2002-07-18
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Similarity 89.5%;
34; Conservative
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nilarity 89.5%;
Conservative
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Pred. No. 0.
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pred. No. 0.00038;
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NAME/KEY: misc_feature;
LOCATION: 56, 57, 573, 6;
LOCATION: 819, 851, 859
LOCATION: B19, 851, 859
OTHER INFORMATION: n = 1
US-09-919-344-14
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TITLE OF INVENTION: Gene Expression Profiles in Livering Control of the State of Control of the State of Control of
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CURRENT APPLICATION NUMBER: US/09/919,344
CURRENT FILING DATE: 2001-07-30
NUMBER OF SEQ ID NOS: 32
SOFTWARE: FASTSEQ for Windows Version 4.0
SEQ ID NO 14
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Best Local Similarity 89.5%;
Matches 34; Conservative
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                                                                                                                                                              RESULT 14
US-09-764-891-8902
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SEQ ID NO 2231
LENGTH: 1969
TYPE: DNA
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APPLICANT: Vockle
APPLICANT: Scherf
APPLICANT: Gene I
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TYPE: DNA
ORGANISM: Homo sapiens
FEATURE:
Sequence 8902, Application US/09764891
Publication No. US20030077808A1
GEMERAL INFORMATION:
APPLICANT: Rosen et al.
TITLE OF INVENTION: Nucleic Acids, Proteins, and Antibodies
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NAME/KEY: unsure
LOCATION: (1)..(1969)
OTHER INFORMATION: n = a or c or g or t
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Scherf, Uwe
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Pred. No. 0.
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Pred. No. 0.0005;
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Query Match Best Local : Matches

Similarity

79.0%; 89.5%;

Score 32.4; Pred. No. 0. Mismatches

DB 9;

Length 13076; Indels

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Conservative

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SOFTWARE: PatentIn Ver. 2.0
SEQ ID NO 8902
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Prior application data removed
NUMBER OF SEQ ID NOS: 10231
LOCATION: (5953)
OTHER INFORMATION: n equals a,t,g,
NAME/RBY: SITE
LOCATION: (11536)
OTHER INFORMATION: n equals a,t,g,
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                                                                                                                                     LOCATION: (5583)
OTHER INFORMATION: n
                                                                                                                                                                                                               LOCATION: (1313)
OTHER INFORMATION: n
NAME/KEY: SITE
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LOCATION: (1311)
OTHER INFORMATION: n
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LOCATION: (1262)
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US-09-764-891-10043
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LENGTH: 13076
TYPE: DNA
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LOCATION: (1275)
OTHER INFORMATION:
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NAME/KEY: SITE
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COTHER INFORMATION: n equals a,t,g, or c
NAME/KEY: SITE
LCCATION: (5583)
COTHER INFORMATION: n equals a,t,g, or c
NAME/KEY: SITE
LCCATION: (5606)
COTHER INFORMATION: n equals a,t,g, or c
NAME/KEY: SITE
LCCATION: (5953)
COTHER INFORMATION: n equals a,t,g, or c
NAME/KEY: SITE
LCCATION: (15953)
COTHER INFORMATION: n equals a,t,g, or c
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COTHER INFORMATION: n equals a,t,g, or c
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COTHER INFORMATION: n equals a,t,g, or c
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ALIGNMENTS

RESULT 1
AW791051/c
LOCUS
DEFINITION ACCESSION VERSION KEYWORDS SOURCE ORGANISM REFERENCE AUTHORS COMMENT FEATURES TITLE JOURNAL source AW791051 222 bp mRNA linear EST 01-MAY-2001 D00369-R Lambda Zap, Stratagene Blumeria graminis f. sp. hordei CDNA Clone D00369 similar to hypothetical protein 2, mRNA sequence. Gene identification in the fungal pathogen Blumeria graminis by expressed sequence tag analysis Unpublished (2000) Contact: Rasmussen/S.W.

Department of Yeast Genetics Blumeria graminis f. sp. hordei.
Blumeria graminis f. sp. hordei
Blumeria graminis f. sp. hordei
Eukaryota; Fungi; Ascomycota; Pezizomycotina; Leotiomycetes;
Erysiphales; Erysiphaceae; Blumeria.
1 (bases 1 to 222)
Thomas, S.W., Rasmussen, S.W., Glaring, M.A., Rouster, J.A. and Others Carlsberg Laboratory 10 Gl. Carlsbergyej, DK-2500, Copenhagen, Denmark Tel: 45 3327 5230 Fax: 45 3327 4766 EST AW791051.1 GI:13902648 AW79105 Email: swr@crc.dk POLYA-No. quality sequence stop: 222 Location/Qualifiers
1. .222 Rouster, J.A. and Oliver

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RESULT 3
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                                                        BF251811 362 bp mRNA
EST419073 Coccidioides immitis spherule
immitis cDNA clone CIAAM73 5' sequence,
BF251811
                                                                                                                                                                                 1 DTATTAGCTCTAGAATTACCACGGGTATCCAAGTAGTAAGG 41
Coccidioides immitis.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Onygenales; mitosporic Onygenales; Co
1 (bases 1 to 351)
1 (bases 1 to 351)
Gardner, M. J. and Kirkland, T.
Generation of ESTs from Coccidioides
Unpublished (2000)
Contact: Malcolm J. Gardner
                                          BF251811.1 GI:16931954
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Department of Eukaryotic Genomics
The Institute for Genomic Research
9712 Medical Center Drive, Rockville,
Tel: 301 838 3519
Fax: 301 838 0208
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      BF251693 351 bp mRNA EST418877 Coccidioides immitis spherule immitis cDNA clone CIAAK21 5' sequence,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Coccidioides immitis
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   BF251693.1 GI:16931759
EST.
                                                                                                                                                                                                                                                                                                                                                                                                                                       Email: gardner@tigr.org.
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               BF251693
                                                                                                                                                                                                                                            Similarity
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/db_xref="taxon:62688"
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/clone="b00369"
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/cell_type="conidia"
/lab_host="Hordeum vulgare"
a 45 c 41 g 70 t
                                                                                                                                                                                                                                                                                                                                                   /organism="Coccidioides immitis"
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/clone_Ilb="Coccidioides immitis spherule cDNA library"
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                                                                                                                                                                                                                                                                                                                             note="Vector:
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                                                                                                                                                                                                                                         94.1%;
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95.18;
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Pred. No. 8.9e-05;
1; Mismatches 1
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Pred. No. 7.3e-05;
1; Mismatches 1;
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                                                                linear EST 15-NOV-20: cDNA library Coccidioides mRNA sequence.
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Matches 39
Query Match
Best Local Similarity
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2E 1 (bases 1 to 362)
2S Gardner, M.J. and Kirkland, T.
3S Generation of ESTs from Coccidioides immitis spheru
L Unpublished (2000)
Contact: Malcolm J. Gardner
Department of Eukaryotic Genomics
The Institute for Genomic Research
9712 Medical Center Drive, Rockville, MD 20850, USA
Tel: 301 838 3519
Fax: 301 838 0208
Email: Agradner
                                                                                                                                                                                                                                        SM Coccidioides immitis

Eukaryota; Fungi; Ascomycota; Pezizomycotina; Euro
Onygenales; mitosporic Onygenales; Coccidioides.

1 (bases 1 to 377)

5 Gardner, M. J. and Kirkland, T.
Generation of ESTs from Coccidioides immitis spher
Unpublished (2000)
Contact: Malcolm J. Gardner
Department of Eukaryotic Genomics
The Institute for Genomic Research
9712 Medical Center Drive, Rockville, MD 20850, US,
Tel: 301 838 3519
Fax: 301 838 0208
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EST419226 Coccidioides immitis s
immitis cDNA clone CIAAP15 5' se
BF251964
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Email: gardner@tigr.org.
Location/Qualifiers
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Location/Qualifiers
                                                                                                    /clone_lib="Coccidioides
/dev_stage="spherule"
/lab_host="SOLR"
                                                                                                                                                              /organism="Coccidioides immitis"
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                                                                                                                                                   /clone-"CIAAP15"
                                                                                       note-"Vector:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   /clone_lib="coccidioides immitis spherule cDNA library"
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94.1%;
95.1%;
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95.1%;
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                                                        94 g
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                                                                                    pBluescript SK(-);
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                                                          95 t
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                                                                                    EcoR1; Site_2:
                                                                                                                                cDNA library"
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Score Pred.

38.6; DB 12; No. 9.2e-05;

Length 377;

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Phytophtno...

1 (bases 1 to 442)

Ramoun, S., Hraber, P. T., Sobral, B.W.S., Nus
Initial assessment of gene diversity for
Phytophthora infestans based on expressed
Phytophthora Biol. 28 (2), 94-106 (1999)
                                 Contact: Govers F
Laboratory of Phytopathology
Wageningen University
Binnenhaven 9, P.O.Box 8025,
                                                                                                                                                                       Potato late blight agent.
Phytophthora infestans
Eukaryota; stramenopiles; Oomycetes; Pythiales; Pythiaceae;
                                                                                                                                                                                                                                                                                                                                                         BE776737.1 GI:10230392
                                                                                                                                                                                                                                                                               BE776737
MY-19-G-09 PinfestansMY
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Department of Eukaryotic Genomics The Institute for Genomic Research 9712 Medical Center Drive, Rockville, Fax: 301 838 3519
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Contact: Malcolm J. Gardner
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Gardner, M.J. and Kirkland, T. Generation of ESTs from Coccidioides immitis spherule cDNA library Unpublished (2000)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1 (bases 1 to 391 Gardner, M.J. and K.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Eukaryota; Fungi; Ascomycota; Pezizomycotina; Eurotiomycetes; Onygenales; mitosporic Onygenales; Coccidioides.
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391 bp mRNA linear EST 15-NOV-2001
immitis cDNA clone CIAAK57 5' sequence, mRNA sequence.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    gardner@tigr.org.
Location/Qualifiers
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                  P.O.Box 8025, 6700 EE, Wageningen, The Netherlands
                                                                                                                                                                                                                                                                                                                                                                                                                                          94.1%;
95.1%;
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Pred. No. 9.3e-05;
1; Mismatches J
                                                                                                                                                                                                                                                                    442 bp mRNA linear phytophthora infestans cDNA,
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                                                                                                                           the comycete
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                                                                                                                      Pathogen
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                                                                                             BASE COUNT
    Query Match
Best Local Similarity 95.1
39; Conservative
                                                                                                                                                                                                           FEATURES
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VERSION
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                                                                                                                                                                                                                   POLYA-No.
                                                                                                                                                                                                                                           10 Gl. Carlsbergvej, DK-2500, Copenhagen, Denmark
Tel: 45 3327 5230
Fax: 45 3327 4766
                                                                                                                                                                                                                     High quality sequence stop:
                                                                                                                                                                                                                                                                                          Contact: Rasmussen, S.W.
Department of Yeast Genetics
Carlsberg Laboratory
10 G1. Carlsbergvei NF-2500
                                                                                                                                                                                                                                                                                                                                                                                               Blumeria graminis f. sp. hordei.
Blumeria graminis f. sp. hordei
Eukaryota; Fungi; Ascomycota; Pezizomycotina; Leotiomycetes;
Erysiphales; Erysiphaceae; Blumeria.

[ bases 1 to 486]
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 158 GTATTAGOTCTAGAATTACTACGGGTATCCAAGTAGTAGG
                                                                                                                                                                                                                                                                                                                                           Unpublished (2000)
                                                                                                                                                                                                                                                                                                                                                                      Gene identification
                                                                                                                                                                                                                                                                                                                                                                                      Thomas, S.W., Rasmussen, S.W., Glaring, M.A.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  AW792005
486 bp mRNA linear EST 01-MAY-2001
D00948-R Lambda Zap, Stratagene Blumeria graminis f. Sp. hordei
CDNA clone D00948 Similar to non-functional folate binding protein,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AW792005.1 GI:13903602
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1 DTATTAGCTCTAGAATTACCACGGGTATCCAAGTAGTAAGG 41
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                                                                                        138
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                                                                  /organism="Blumeria graminis f. sp. hr/db_xref="taxon:62688"
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/clone_llb="ambda zap, Stratagene"
/cell_type="conidia"
/lab_host="Hordeum vulgare"
lab_host="115 g 132 t
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               117 a
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                                                                                                                                                                                           Location/Qualifiers
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 mycellum in synthetic medium.

Alabhost="B. Coli, strain DH5-alpha"

/note="Vector: pspoper1; Site_1: Sal1; Site_2: Not1; Total

cultured for weeks in synthetic medium. EST clones were

by the prefix MY (for mycelial) and the successive number

of the microtiter plate (e.g. MY-06-A-04)."

89 c 107 g 124 t 5 others
                       94.18;
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/strain="DDR7602, Al mating type"
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95.18;
 Score 38.6; DB 10;
Pred. No. 0.0001;
1; Mismatches 1;
                                                                                                                                                                                                                                                                                                                                                in the fungal pathogen Blumeria graminis by
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Score 38:6; DB 12;
Pred. No. 9:8e-05;
1; Mismatches 1;
Indels
                          Length 486;
                                                                                                                                                                                                                                                                                                                                                                           Rouster, J.A. and Oliver
                                                                                                                                                       horde1
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REFERENCE AUTHORS

JOURNAL MEDLINE TITLE

0 Gaps

0,

SOURCE ORGANISM

EYWORDS ERSION RESULT 6 BE776737/c

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155

Matches Query Match Best Local

39;

Similarity 95.1 39; Conservative

Local

BASE COUNT

107

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76 c

FEATURES

Source

COMMENT

SOURCE ORGANISM

REFERENCE AUTHORS TITLE JOURNAL

KEYWORDS ACCESSION VERSION RESULT 5 BF251561/c

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Matches

39;

Conservative

1; Mismatches

1.

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DEFINITION

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RESULT 8
BF251704/c
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BE776329/c
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Unpublished (2000)
Contact: Malcolm J. Gardner
Contact: Malcolm J. Gardner
Department of Eukaryotic Genomics
Department of Eukaryotic Genomics
The Institute for Genomic Research
The Institute for Genomic Res
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         488 bp EST418888 Coccidioides immitts s immitts cDNA clone CTAAK33 5' se BP251704
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1 (bases 1 to 488)

1 Gardner, M. J. and Kirkland, T.

Generation of ESTs from Coccidioides immitis spherule cDNA like Generation of Coccidioides.
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potato late blight agent.
phytophthora infestans
phytophthora infestans
Eukaryota; stramenopiles; Oomycetes; Pythiales; Pythiaceae;
Laboratory of Phytopathology
Wageningen University
Wateringen 9, P.O.Box 8025, 6700 EE, Wageningen, The Netherlands
Tel: 31 317 483 138
Fax: 31 317 483 412
                                                                                                                                                                                       Kamoun, S., Hraber, P.T., Sobral, B.W.S., Nuss, D. and Govers, F. Initial assessment of gene diversity for the comycete pathogen Phytophthora infestans based on expressed sequences Phytophthora infestans based on expressed sequences Fungal Genet. Biol. 28 (2), 94-106 (1999)
                                                                                                                                                                                                                                                                                                                                phytophthora.
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/db_xref="taxon:5501"
/clone="CIAAK33"
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/dev_stage="spherule"
/lab_host="SOLR"
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pred. No. 0.0001;
1; Mismatches
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spherule cDNA library Coccidioides
sequence, mRNA sequence.
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                                                                                                                                                                                                                                                                                                                                                                                                                                               Coccidioides immitis
Eukaryota; Fungi; Ascomycota; Pezizomycotina; Eurotiomycetes;
Eukaryota; Fungi; Ascomycota; Coccidioides.
Onygenales; mitosporic Onygenales; Coccidioides.
1 (bases 1 to 502)
1 (bases 1 to 502)
1 (bases 1, and Kirkland, T.
Generation of ESTs from Coccidioides immitis spherule cDNA library
Generation of ESTs from Coccidioides immitis spherule cDNA library
Contact: Malcolm J. Gardner
Contact: Malcolm J. Gardner
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Department of Bukaryotic Genomics
The Institute for Genomic Research
9712 Medical Center Drive, Rockville, MD 20850, USA
Tel: 301 838 3519
Fax: 301 838 0208
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                138 a
                                                                                       Similarity
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Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         /lab_host="E. coll. strain DH5-alpha"
//note="Yector: pSpORT1, Site_1: SalI; Site_2: NotI, Total
//note="Yector: pSpORT1, Site_1: SalI; Site_2: NotI, Total
//note="Yector: pSpORT1, Site_1: SalI; Site_2: NotI, Fotal
//note="Yector: pSpORT1, Site_1: SalI; Site_2: NotI, Fotal
//note="Yector: pSpORT1, Site_1: SalI; Site_2: NotI, Fotal
//note="Yector: psport-strain"
//note="Yector: plate, preceded named by their position in the microtiter plate, preceded named by the prefix MY (for mycelial) and the successive number by the prefix MY (for mycelial) and the successive number of the microtiter plate (e.g. MY-06-A-04)."

of the microtiter plate (e.g. MY-06-A-04)."

a 100 c 122 g 138 t 2 others
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/dev_stage="4-week old vegetative, non-sporulating
mycellum in synthetic medium"
mycellum in synthetic medium"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        /organism="phytophthora infestans'
/strain="pdR7602, Al mating type"
/db_xref="taxon:4787"
                                                                        Conservative
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                                                                                                                                                                             /note="Vector: pbluescript sk(-);
xho1"
                                                                                                                                                                                                                                                                 /organism="Coccidioides
/db_xref="taxon:5501"
/clone="CIAAY35"
                                                                                                                                                                                                              /cione_lib="coccidioides immitis spherule cDNA library"
/dev_stage="spherule"
/lab_host="SOLR"
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pred. No. 0.0001;
1; Mismatches
                                                                                               score 38.6;
pred. No. 0.
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                                                                                    Mismatches
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                                                                                                                                                                                                                                                                                                                                                                                                                                            Local Similarity
                                                CODEACT: G1]zen M
AGTICULTURE and AGTI-Food Canada
1391 Sandford Street, London, Ontario,
Tel: 519 457 1470
Fax: 519 457 3997
                                                                                                                                                                                                                                                                                                                                                             1 (bases 1 to 516)
Outob, D., Hraber, P.T., Sobral, B.W.S. and Gijzen, M. Comparative analysis of expressed sequences in Phyplant Physiol. 123 (1), 243-254 (2000)
                                                                                                                                                                                                                    Phytophthora sojae.
Phytophthora sojae
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3-5F-MY PsojaeMY Phytophthora
                                                                                                                                                                                             Eukaryota; stramenopiles; Oomycetes; Pythiales; Pythiaceae;
                                                                                                                                                                                                                                                                                                                                                                                                                                  39;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            10 G1. Carlsbergvej, DK-2500, Copenhagen, Denmark
Tel: 45 3327 5230
Fax: 45 3327 4766
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        High quality sequence stop: 515
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Department of Yeast Genetics
Carlsberg Laboratory
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Contact: Rasmussen, S.W.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     POLYA-No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Gene identification in the fungal pathogen Blumeria graminis by unpublished (2000)
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Blumeria graminis f. sp. hordei
Blumeria graminis f. sp. hordei
Eukaryota; Fungi; Ascomycota; Pezizomycotina; Leotiomycetes;
Erysiphales; Erysiphaceae; Blumeria.

1 (bases 1 to 515)
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D01189-R Lambda Zap,
CDNA clone D01189 sir
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  mRNA sequence.
AW792430
AW792430.1 GI:13904027
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                                              gijzenm@em.agr.ca.
                                                                                                                                                                                                                                                                                                                                                                                                                             Conservative
/organism="Phytophthora sojae"
                          Location/Qualifiers
1. .516
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                /Clone_lib="Lambda Zap, Stratagene"
/Cell_type="conidia"
/lab_host="Hordeum vulgare"
| 104 c 119 g 142 t
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            /organism="Blumeria graminis f./db_xref="taxon:62688"
/clone="D01189"
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                                                                                                                                                                                                                                                                                                                                                                                                                                        94.18;
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                                                                                                                                                                                                                                                                                                                                                                                                                                Score 38.6; DB 10;
Pred. No. 0.0001;
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                                                                                                                                                                                                                                                                                                                                                                                                               Unpublished (2000)
Contact: Malcolm J. Gardner
Department of Eukaryotic Genomics
The Institute for Genomic Research
9712 Medical Center Drive, Rockville
Tel: 301 838 3519
Fax: 301 838 0208
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             153 GTATTAGCTCTAGAATTACTACGGGTATCCAAGTAGTAAGG
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Onygenales; mitosporic Onygenales; Coccidioides,
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EST418899 Coccidioides immitis spherule cDNA library C
immitis cDNA clone CIAAK45 5' sequence, mRNA sequence.
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//dev_stage="mycelium"

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                                                                                                                                                                      /note="Vector: pBluescript SK(-);
                                                                                                                                                                                                           /dev_stage="spherule"
/lab_host="solk"
                                                                                                                                                                                                                             /clone_lib="coccidioides immitis spherule cDNA library"
                                                                                                                                                                                                                                                                                            /organism="Coccidioides immitis"
/db_xref="taxon:5501"
                                                                                                                                                                                                                                                                               /clone="CIAAK45"
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98 c 123 g
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                                       94.18;
95.18;
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of ESTs from Coccidioides immitis spherule cDNA library
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/db_xref="taxon:67593"
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     Score 38.6; DB 12;
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1; Mismatches 1;
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fmhlo.pk005.gl Metarhizium anisopliae sf. acridum ARSEF 324
Metarhizium anisopliae var. acridum cDNA, mRNA sequence.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Metarhizium anisopliae var. acridum.
Metarhizium anisopliae var. acridum
Eukaryota; Fungi; Ascomycota; Pezizomycotina; Sordariomycetes;
Hypocreales; Clavicipitaceae; mitosporic Clavicipitaceae;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Department of Entomology
University of Maryland
4112 Plant Sciences Building, College Park,
Tel: 301 405 16 13
Fax: 301 314 92 90
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1 (bases 1 to 521)

Freimoser, F.M., Screen, S., Baga, S., Hu, G. and St. Leger, R.J.

Freimoser, F.M., Screen, S., Baga, S., Hu, G. and St. Leger, R.J.

EST analysis of genes expressed by two different insect pathogenic general during optimized secretion of proteins unpublished (2002)
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1 Similarity 95.1%;
39; Conservative
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EST419633 Coccidioides immitis spherule cDNA library Coccidioides
immitis cDNA clone CIAAV41 5' sequence, mRNA sequence.
                                                                                                           Eukaryota; Fungl; Ascomycota; Pezizomycotina; Eurotiomycetes; Onygenales; mitosporic Onygenales; Coccidioides.

1 (bases 1 to 541)
1 (bases 1 to 541)
1 and Kirkland, T.
Generation of ESTs from Coccidioides immitis spherule cDNA library Unpublished (2000)
Contact: Malcolm J. Gardner
                                                                                                                                                                                                                                                                                                                                   Coccidioides immitis .
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Department of Eukaryotic Genomics
The Institute for Genomic Research
9712 Medical Center Drive, Rockville, MD 20850, USA
Tel: 301 838 3519
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Location/Qualifiers
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/clone_lib="Metarhizium anisopliae sf. acridum /note="Vector: Uni2ap; Metarhizium anis
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/strain-"ARSEF 324"
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Matches 39; Conserv
Fax: 301 838 0208
Email: gardner@tl
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                                            Conservative
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                                                                                                    ø
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/dev_stage="spherule"
/lab_host="SOLR"
                                                                                                                                                                                                            Location/Qualifiers
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/db_xref="taxon:5501"
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                                                          94.1%;
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41
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Pred. No. is the number of results predicted by chance to have a

score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

esult No.	Score	Query Match	Length	DB	Ħ	Description
	00			ထထ	Z94136 Z94150	36 Cladospor 50 unculture
	•		N	00		94151
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	•		- -	0 00	AF056370	0
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ч	40.2	8	657	11	PM6A1B	AL686152 Penicilli
13	•		660	œ	CNS01BM5	Botrytis
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c 22			949	a	AAU67427	U67427 Arachnopezi
N	0	ω.	959	8	HFU67430	_
่วผ	9.0		969	ω	AF113712	
	0:	00 0	985	30 0	AF107347	AF107347 Bacomyces
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ω	.0	œ	1030	œ	AF203454	54 Meloderm
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		œ	1031	ω (AF203458	AF203458 Cyclaneus
ω		8	1031	8	AF203462	03462
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c 40	40.2	œ	1032	0	0345	ω
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C 45	40.2	98.0	1032	20 0	AF203464	AF203464 FORBINGE
						- 1

ALIGNMENTS

REFERENCE AUTHORS TITLE		ORGANISM	KEYWORDS	VERSION	ACCESSION	DEFINITION	LOCUS	Z94136/c	RESULT 1
1 (bases 1 to 420) Kowalchuk, G.A., Gerards, S. and Woldendorp, J.W. Detection and characterization of fungal infections of Ammophila	Bukaryota; Fungi; Ascomycota; Pezizomycotina; Dothideomycetes et Chaetothyriomycetes incertae sedis; Mycosphaerellaceae; mitosporic Mycosphaerellaceae; Cladosporium.	Cladosporium cladosporioides	18S ribosomal RNA; 18S rRNA.	294136.1 GI:20975704	294136	ial 18S rRNA gene,	294136 421 bp DNA linear PLN 20-MAY-2002		

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AUTHORS
TITLE
JOURNAL
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                                                                                                                                                                                                                                                                                                                                                                        uncultured fungus

Eukaryota; Fungi; environmental samples.

1 (bases 1 to 420)

1 (bases 1 to 420)

Kowalchuk,G.A., Gerards,S. and Woldendorp,J.W.

Detection and characterization of fungal infections of Ammophila arenaria (marram grass) roots by denaturing gradient gel electrophoresis of specifically amplified 18s rDNA Appl. Environ. Microbiol. 63 (10), 3858-3865 (1997)
                                                                                                                                                                                                                             Direct Submission
Direct Submission
Submitted (16-APR-1997) Kowalchuk G.A., Netherlands Institute of Submitted (16-APR-1997) Kowalchuk G.A., Netherlands Institute of Scology, Plant-Microorganism Interactions, Boterhoeksestraat 22, an 6666 ZG, Heteren, the Netherlands
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1 DCCCCGAAGGGCATTGGTTTTTTATCTAATAAATACACCCC 41
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Submitted (16-APR-1997) Kowalchuk G.A., Net Ecology, Plant-Microorganism Interactions, Ecology, Plant-Microorganism the Netherlands
Box 40, 6666 ZG, Heteren, the Netherlands
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          40;
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              /product="18S ribosomal RNA"
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<1. .>421
                                                                                                                /specific_host="Ammophila arenaria"
/db_xref="taxon:175245"
                                                                                                                                                                        /macronuclear
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                                                                                                                                                    'isolate="EB-8"
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/db_xref="taxon:29917"
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Kowalchuk,G.A.

Direct Submission

Submitted (16-APR-1997) Kowalchuk G.A., Net

Submitted (16-APR-1997) Rowalchuk G.A., Net

Ecology, Plant-Microorganism Interactions,

Box 40, 6666 ZG, Heteren, the Netherlands
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    uncultured fungus

Eukaryota; Fungi; environmental samples.

1 (bases 1 to 422)

1 (bases 1 to 422)

Rowalchuk, G.A., Gerards, S. and Woldendorp, J.W.

Detection and characterization of fungal infections of arenaria (marram grass) roots by denaturing gradient ge electrophoresis of specifically amplified 18s rowa Appl. Environ. Microbiol. 63 (10), 3858-3865 (1997)
                                                                                                                                                                                                                                                     1 DCCCCGAAGGGCATTGGTTTTTTATCTAAATAAATACACCCC 41
Eurotiales; Trichocomaceae; mitosporic 1 (bases 1 to 494)
Shintani, T. and Matsumoto, Y.
Aspergillus niger gene for 185 rRNA, pa published Only in DataBase (1999)
                                                                  Aspergillus niger (strain:IEF1) DNA.
Aspergillus niger
Eukaryota; Fungi; Ascomycota; Pezizo
                                                                                                                          Aspergillus niger gene
AB030916
AB030916.1 GI:5738920
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18S ribosomal RNA; 18S rRNA.
uncultured fungus.
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/product="18S ril
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<1. .>422
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/db_xref="taxon:175245"
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Pred. No. 0.00035;
1; Mismatches 0;
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                                                     Pezizomycotina; Eurotiomy itosporic Trichocomaceae;
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                                                    198 GCCCCGAAGGGCATTGGTTTTTATCTAATAAATACACCCC 158
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Submitted (10-AUG-1999) Tomoyoshi Shintani, Industrial Researc Center of Ehime Prefecture, Laboratory of Food Process; 487-2 Kumekubota, Matsuyama, Ehime 791-1101, Japan (E-mail:shintanidiri.pref.ehime.jp, URL:www.iri.pref.ehime.jp, Tel:81-89-976-7612, Fax:81-89-976-7313)
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Uncultured fungus partial 18S
AJ311478. 1 GI:18693082
18S ribosomal vara
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Shintani, T. and Mat
                                                                                                                                                                                                                                                                                                                                                                                                      denaturing gradient gel electrophoresis and phylogenetic 18S rDNA sequence analysis
J. Microbiol. Methods 47, 347-356 (2001)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                40;
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                                                                                                                                                                                                                                                                                                                             Submitted (14-FEB-2001) Schabereiter-Gurtner C., Institute for Microbiology and Genetics, University of Vienna, Dr. Bohr-Gasse 9, 1030 Vienna, AUSTRIA
                                                                                                                                                                                                                                                                                                                                                                                                                                                   Schabereiter-Gurtner, C., Pinar, G., Lubitz, W. Analysis of fungal communities on historical
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            uncultured
                                                                                                                                                                                                                                                                                                                                                                       Direct Submission
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        uncultured fungus.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Eukaryota; Fungi; environmental samples.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             /organism="Aspergillus niger"
/strain="IEF1"
/db_xref="taxon:5061"
<1. _.>494
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  /product="18S ribosomal RNA"
100 c 121 g 131 t
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ocation/Qualifiers
                                                                                                                                                                           /product="18S ribosomal 100 c 119 g 1:
                                                                                                                                                                                                                                                                        /organism="uncultured fungus"
/db_xref="taxon:175245"
                                                                                                                                                                                                    /gene="18S rRNA"
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                                                                                                                                                                                                                                                          /clone="GC-K27"
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Pred. No. 0.
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Pred. No. 0.00034;
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U20382
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Spatafora, J. W., Mitchell, T.G. and Vilgalys, R.
Spatafora, J. W., Mitchell, T.G. and Vilgalys, R.
Analysis of genes coding for small-subunit rRNA sequences
studying phylogenetics of dematiaceous fungal pathogens
studying phylogenetics of dematiaceous fungal pathogens
J. Clin. Microbiol. 33 (5), 1322-1326 (1995)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Exophiala mansonii.

Exophiala castellanii
Exophiala castellanii
Eukaryota; Fungi; Ascomycota; Pezizomycotina; Ch
Chaetothyriales; Herpotrichiellaceae; mitosporic
Herpotrichiellaceae; Exophiala.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Submitted (27-JAN-1995) Joseph Plant Pathology, 2082 Cordley F Corvallis, OR 97331, USA
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Spatafora, J.W.
Direct Submission
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                                                                                                            Submitted (14-FEB-2001) Schabereiter-Gurtner C., Microbiology and Genetics, University of Vienna,
                                                                                                                                                                        Analysis of fungal communities on histor denaturing gradient gel electrophoresis sequence analysis
J. Microbiol. Methods 47, 347-356 (2001)
2 (bases 1 to 526)
                                                                                                                                                                                                                   Schabereiter-Gurtner,C., Pinar,G., Lubitz,W. and Roelleke,S. Analysis of fungal communities on historical church window g denaturing gradient gel electrophoresis and phylogenetic 185
                                                                                                                                                                                                                                                                                              uncultured fungus.
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AJ311484
AJ311484.1 GI:18693088
18S ribosomal RNA; 18S:
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                                                                                           Microbiology and Genetics, 1030 Vienna, AUSTRIA
                                                                                                                                      Direct Submission
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/note="approximately 400 bp separate tl
and the 5' end of segment 2"
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/organism="uncultured fungus"
/db_xref="taxon:175245"
/clone="GC-K44"
1. .526
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     /organism="Exophiala castellanii"
/db_xref="taxon:91922"
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AF056372
Jumpponen, A. and Trappe, J.M.
                                                                                                                                                                            euascomycete sp. A12b2.
euascomycete sp. A12b2
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                       Pezizomycotina.
                            Eukaryota; Fungi; Ascomycota;
                                                                                                                          AF056372
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                                                                                                                                                                                                                                                                                                                                                                                                                                                             1 (bases 1 to 544)
Jumpponen, A. and Trappe, J.M.
Dark-septate endophytes: a re
root-colonizing fungi
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               euascomycete sp.
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AF056370
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Jumpponen, A. and Trappe, J.M.
                                                                                                                                                                                                                                                                                                                                                                                                                                                      Unpublished
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Eukaryota; Fungi; Ascomycota; Pezizomycotina;
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           (bases 1 to 544)
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                                                                                                                                                                                                                                                                                                            /organism="euascomycete sp. WB12"
/strain="WB12"
/strain="WB12"
/specific_host="Betula papyrifera"
/db_xxef="taxon:75492"
/note="gift of Kathleen Ann Johnson"
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112 c 129 g 140 t 4 oth
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Pred. No. 0.00034;
L; Mismatches 0;
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Pred. No. 0.00034;
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                             Pezizomycotina; unclassified
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40;
                                                                                                                                                                                                                                          Jumpponen, A. and Trappe, J.M.
Direct Submission
Direct Submission
Submitted (25-MAR-1998) Forest Science, Oregon State
3200 NW Jeffersonway, Corvallis, OR 97331, USA
                                                                                                                                                                                                                                                                                                                                  Helotiales; mitosporic Helotiales;
1 (bases 1 to 546)
Jumpponen,A. and Trappe,J.M.
Dark septate endophytes: a review of
                                                                                                                                                                                                                                                                                                                                                                                                  Phialocephala fortinii.
Phialocephala fortinii
                                                                                                                                                                                                                                                                                                                                                                                                                                                        sequence.
AF055885
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         AF055885
Phialocephala fortinii
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           40;
                                                                   Similarity
                                                                                                                                                                                                                                                                                                            Unpublished
                                                                                                                                                                                                                                                                                                                       root-colonizing fungi
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                                                                                                                                                                                                                                                                                                                                                                                                                                            AF055885.1
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Jumpponen, A. and Trappe, J.M.
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                                                                                                               /product="small subunit ribosomal RNA" 112 c 129 g 142 t 1 oth
                                                                                                                                                      /specific_host="Lupinus latifolius New Phytologist 124: 93)" | db_xref="taxon:62722"
                                                                                                                                                                                              /organism="Phialocephala fortini1"
/strain="SE24"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    /organism="euascomycete sp. A12b2"
/strain="A12b2"
/specific_host="Alnus sp."
/db_xref="taxon:75494"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    /product="small subunit ribosomal RNA"
111 c 125 g 133 t 1 othe
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                                                 Score 40.2; DB 8;
Pred. No. 0.00034;
1; Mismatches 0
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Pred. No. 0.00034;
1; Mismatches 0.
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ales; Phialocephala
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PM6A1B/c
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                                                                                                            source
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Dexter HC Man Building 8, Sassoon Re
Location/Qualifiers
1. .657
                                                                                                                                                                                                                Yuen, K.Y., Pascal, G., Wong, S., Cheung, E., Medigue, C. and Dancl Exploring the Penicillium marne
                                                                                                                                                                                                                                                                                                                              STS.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          40;
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AF056371
                                                                                                                                                               Direct Submission
                                                                                                                                                                        2 (bases 1 to 657)
Danchin, A. and Pascal, G.
                                                                                                                                                                                                      Unpublished
                                                                                                                                                                                                                                                                  Eukaryota; Fungi; Ascomycota; Pezizomycotina; Eurotiomycetes, Eurotiales; Trichocomaceae; mitosporic Trichocomaceae; Penic
                                                                                                                                                                                                                                                                                                   Penicillium marneffei
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Jumpponen, A. and Trappe, J.M.
Direct Submission
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Jumpponen, A. and Trappe, J.M.
Dark-septate endophytes: a r
                                                                                                                                                                                                                                                                                                                                                                                    PM6A1B
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Location/Qualifiers
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                                                    /organism="Penicillium marneffei"
/db_xxef="taxon:37727"
/clone="pm6al.b"
/clone="pm6al.b" 187 c 184 g 164 t
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    /specific_host="Carex sp."
/db_xref="taxon:75493"
/note="gift of Kurt Haselwandter"
<li..>551
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112 c 129 g 141 t 5 oth
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/strain="cc3"
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Pred. No. 0.00034;
1; Mismatches 0;
Score 40.2; DB 11;
Pred. No. 0.00033;
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                                                                                                                                Road, Pokfulam, Hong Kong
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           Length 657;
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                                                                                                                                                                                                                                                                                                                                                              tagged site.
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ene, partial
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PM8E3B/c
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CNS01BM5
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Botryotinia fuckeliana.
Botryotinia fuckeliana
Eukaryota; Fungi; Ascomycota; P
Helotiales; Sclerotiniaceae; Bo
1 (bases 1 to 660)
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                                                                                                                                                                                                                                                                                                72
                                                                                                                                                                                                                                                                                            40;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Submitted (01-SEP-1999) Genoscope - Centre National de Sequencage : CP 5706 91057 EVRY cedex - FRANCE (B-mail : seqref@genoscope.cns.fr)
The cDNA library to be analyzed within the framework of this project was created using a Botrytis cinerea strain which was grown under conditions of nitrogen deprivation, which is the normal situation for B. cinerea during its development on its host plant. The library was produced in an oriented direction, in the pBSII
                                                          Yuen, K.Y., Pascal, G., Wong, S., Cheung, E., Medigue, C. and Dancl
                                                                                                 Penicillium marneffei
Eukaryota; Fungi; Ascomycota; Pezizomycotina; Eurotiomycetes;
Eurotiales; Trichocomaceae; mitosporic Trichocomaceae; Penici
                                                                                                                                                             Penicillium marneffei STS,
AL685346
AL685346.1 GI:19336649
STS.
                                            Cheung, E., Medigue, C. and Exploring the Penicillium
                                                                                                                                                 Penicillium marneffei.
                                                                                                                                                                                                                        PM8E3B
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AL114405.1 GI:5829024
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AL114405
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2 (bases 1 to 660)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Submitted (01-SEP-1999) Phytopathologie, INRA, route de St Cyr.
(bases 1 to 762) nchin, A. and Pascal, G.
                                                                                                                                                                                                                                                                                                                                                                                                                                    196
                                                                                                                                                                                                                                                                                                                                                        Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Conservative
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                                                                                                                                                                                                                                                                                                                                                                                                                               /note="Genoscope
176 c 119
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            /organism="Botryotinia
/strain="T4"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                            /db_xref="taxon:40559"
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Pred. No. 0.
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T4 cDNA library under conditions of
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s, clone
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                                         Danchin, A. marneffei genome
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ; Pezizomycotina; Leotiomycetes;
Botryotinia.
                                                                     Glaser, P., Woo, P.,
                                                                                                                                                                                                       DNA
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                                                                        Kunst, P.,
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LOCUS
Search completed: June 12, 2003, 02:33:53 Job time: 622.827 secs
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Best Local Similarity 97.6%;
Matches 40; Conservative
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ALG85282
ALG85282.1 GI:19336603
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Submitted (08-MAR-2002) Danchin A., HKU-Pasteur Research Centre, Dexter HC Man Building 8, Sassoon Road, Pokfulam, Hong Kong Location/Qualifiers
                                                                                       1 DCCCCGAAGGGCATTGGTTTTTTATCTAATAAATACACCCC 41 :|||||||||||||||
                                                                                                                                                                                                                                                                                             2 (bases 1 to 765)
Danchin,A. and Pascal,G.
Direct Submission
Submitted (08-MAR-2002) Danchin A., HKU-Pasteur Research Centre,
Dexter HC Man Building 8, Sassoon Road, Pokfulam, Hong Kong
Dexter HC Man Building 8, Sassoon Road, Pokfulam, Hong Kong
1. 765
                                                                                                                                                                                                                                                                                                                                                                                                                 Yuen,K.Y., Pascal,G., Wong,S., Glaser,P., Woo,P., Kunst,P., Cheung,E., Medigue,C. and Danchin,A. Exploring the Penicillium marneffel genome Unpublished
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Penicillium marneffei
Penicillium marneffei
Penicillium marneffei
Eukaryota; Fungi; Ascomycota; Pezizomycotina; Eurotiomycetes;
Eurotiales; Trichocomaceae; mitosporic Trichocomaceae; Penicillium.
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/db_xxef="taxon:37727"
/clone="pm863.b"
207 c 220 g 183 t
                                                                                                                                                                                                                        /organism="Penicillium marneffei"
/db_xref="taxon:37727"
/clone="pm8b7.b"
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                                                                                                                                     Score 40.2; DB 11; Length 765; Pred. No. 0.00032; 1; Mismatches 0; Indels 0
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GenCore version 5.1.6 Copyright (c) 1993 - 2003 Compugen Ltd

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Result
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re greater than or equal to the score of the result being printed,
is derived by analysis of the total score distribution.
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Match
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1 dccccgaagggcatt
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Listing first 45 s
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AAF11545
AAI68286
ABA01154
AAZ00859
AAQ73434
AAF08498
AAF10913
ABA01152
AAS16211
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                                                                                       Aspergillus niger
Bulgaria inquinans
Deuteromycetes pol
A. fumigatus 185 r
                                  A. fumigatus 185 r
Histoplasma capsul
Fusarium venenatum
Fusarium venenatum
                                                                                                                                                                                           Description
                    Deuteromycetes
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	AAD38416	24	29	57.1	23.4	45
	AAD38412	24	29	٠	ω.	44
	AAQ71869	15	444	•	23.6	43
Eimeria mitis ssrR	AAQ31629	13	1749	•	N	42
E. mitis ssrRNA.	AAQ31472	13	74	•	24	41
E. mitis ssrRNA.	AAQ31325	13	74	٠	24	40
E. necatrix ssrRNA	AAQ31326	13	75	•	4	39
Fusarium solani f.	AAV61669	19	84	59.5		38
	AAQ31336	13	74	•		37
acervulina	AAQ31469	13	1748	•	24.6	36
cervulina s	AAQ31322	13	~1	•		35
al PCR pr	AAX23834	20	. 29	•	•	34
3	AAQ31643	13	1747	•	ŗ	33
E. praecox ssrRNA.	AAQ31327	13	1747	62.4	ÿ	32
meria nec	AAQ31647	13	1756	•	Ġ	31
E. tenella ssrRNA.	AAQ31328	13	1756	•	Ġ	30
Cyclcospora 16s-11	AAF86243	22	1747	•	ū	29
Consensus Cyclospo	AAF86238	22	1747	•	5	28
brunetti	AAQ31470	13	1744	•	5	27
E. brunetti ssrRNA	AAQ31323	13	1744	62.9	5	26
Eimeria brunetti s	AAQ31638	13	1744	62.9	5	25
aromyces o	ABA99033	24	3420	63.4	26	24
18S rRN	AAF23018	22	1802	63.4		23
t DNA to	AAD14297	22	1798	63.4		22
NA to infe	AAD14004	22	1798	63.4	26	21
S. exiguus 185 rRN	AAF25849	22	1776	•	26	20
cleotide	AAA46368	21	1750	63.9		19
	AAT90818	18	1750	•	26.2	18
. pisiformis sm	AAQ71870	15	447	•	σ	17
CO.	AAQ71868	15	447	•	29	16
	AAQ71867	15	447	70.7	29	15
	AAF11316	21	1024	•	٩	14
	AAV60108	19	1904	•	۲.	13
Rhizoctonia solani	AAV60107	19	1793	•	32.2	
Putrefactive micro	S	23	1734	78.5		11
Fusarium oxysporum	AAV61668	19	1771	87.3	ŗ	10

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ALIGNMENTS

RESULT 1 AAF11545/c ID AAF11545 standard; cDNA; 568

BP.

AAF11545;

13-MAR-2001

(first entry)

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Multiple gene expression; filamentous fungal cell; EST; expressed sequence tag; Fusarium venenatum; Aspergillus niger; Aspergillus oryzae; Trichoderma reesei; identification; recombination; culture condition; environmental stress; spore morphogenesis;
                                                                                                                                                                                                                                               Aspergillus niger EST SEQ ID NO:4068.
                  Berka RM, Rey MW,
                                                                        22-MAR-1999;
                                                                                            22-MAR-2000; 2000WO-US07781.
                                                                                                                 28-SEP-2000.
                                                                                                                                      WO200056762-A2.
                                                                                                                                                            Aspergillus niger.
                                                                                                                                                                                metabolic pathway
                                        (NOVO ) NOVO NORDISK BIOTECH INC.
                                                                        99US-0273623.
                                                                                                                                                                                engineering; catabolic pathway engineering; ss.
                    Shuster JR,
                  Kauppinen
                  Ś
                    Clausen
                    IG,
                    Olsen
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Fungus

genomic

WPI; 2000-594572/56.

PB;

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RESULT 2
AAI68286/c
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                CC The present invention describes a method for monitoring differential CC expression of genes in a first filamentous fungal (FF) cell relative to CC expression of the same genes in one or more second filamentous fungal CC cells. The method uses fluorescence-labeled nucleic acids isolated from CC the FF cells and a substrate of expressed sequence tags (EST). The ESTs CC are used in the methods for monitoring differential expression of genes CC in a first filamentous fungal (FF) cell relative to expression of the CC same genes in one or more second filamentous fungal cells. Monitoring CC the global expression of genes from FF cells allows the production CC potential of the microorganisms to be improved. New genes may be CC discovered, possible functions of unknown open reading frames can be CC discovered, possible functions of unknown open reading frames can be CC discovered. The expression of genes can be used to study how FF cells adapt to changes in culture conditions, environmental stress, spore CC morphogenesis, recombination, metabolic or catabolic pathway
CC engineering. Using ESTs provides several advantages over genomic or caracy equals one gene or open reading frame, and organisation of the CC microarrays based on function of the gene products to facilitate analysis of the results. AAF01478 to AAF11247 represents ESTs from Aspergillus oryzae; and CC all engineering. AAF11854 to AAF11878 represents ESTs from Trichoderma reesei, which are
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Query Match
Best Local S
Matches 40
          New indole derivative M-3-A, prepared by culture of Ascomycetes M-3, has antifungal activity - \,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Monitoring differential expression of genes in filamentous fungal cells uses fluorescence-labeled nucleic acids isolated from the cells and a substrate of expressed sequence tags -
                                                                WPI; 2001-621605/72
                                                                                                                                 03-MAR-2000; 2000JP-0059685
                                                                                                                                                                  03-MAR-2000;
                                                                                                                                                                                                     11-SEP-2001
                                                                                                                                                                                                                                                                   Bulgaria inquinans
                                                                                                                                                                                                                                                                                                                                                                                                                                                    AAI68286 standard; DNA; 1731 BP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Sequence
                                                                                                                                                                                                                                    JP2001247566-A
                                                                                                                                                                                                                                                                                                      rice
                                                                                                                                                                                                                                                                                                                      Bulgaria
                                                                                                                                                                                                                                                                                                                                                    Bulgaria inquinans M-3 18S rDNA.
                                                                                                                                                                                                                                                                                                                                                                                     19-DEC-2001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Claim
                                                                                               (KAIY-) KAIYO BIOTECHNOLOGY KENKYUSHO
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    14879 to AAF15337 represents ESTs from Trichoderma reesei, specifically claimed in the present invention.
                                                                                                                                                                                                                                                                                                     leaf spot;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     222
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            87;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      l Similarity
40; Conserv
                                                                                                                                                                                                                                                                                                     inquinans M-3; 18S rDNA; spot; ds.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  DCCCCGAAGGGCATTGGTTTTTTTTCTAATAAATACACCCC 41
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       568
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Page 1791-1792;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Conservative
                                                                                                                                                                  2000JP-0059685
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       BP;
                                                                                                                                                                                                                                                                                                                                                                                     (first
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                                                                                                                                                                                                                                                                                                                                                                                 entry)
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     C; 141 G;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Score 40.2; D
Pred. No. 4.3e
1; Mismatches
                                                                                                                                                                                                                                                                                                                  indole;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   150 T; 6 other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    4.3e-06;
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                                                                                                                                                                                                                                                                                                                 M-3-A; antifungal;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     568;
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RESULT 4
AAZ00859,
ID AAZ0

0859/c AA200859

standard;

DNA;

1733

ВP

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AAZ00859;

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RESULT 3
ABA01154,
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                                                                                                                                                                                           SXCCCCCX PRX DXX PX PX PX PX X PX X DXX AXX X 
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Best Local :
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ABA01154
                                                                                                                                                                                         Sequence 1731 BP;
                                                                                                                                                                                                                                                   The present invention relates to a new microbe of Acinetobacter or Burkholderis genus producing aldonic acid and oxidising specifically the hemiacetal hydroxy group of a saccharide having said hydroxy group.

Aldonic acid is used as a mineral reinforcing agent. The present sequence and the present sequence are allowed to the present sequence.
                                                                                                                                                                                                                                                                                                                                                                        Disclosure; Page 18-19; 22pp; Japanese.
                                                                                                                                                                                                                                                                                                                                                                                                                    A new microbe for producing aldonic acid, Acinetobacter or Burkholderis -
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           27-DEC-1999;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       26-DEC-2000;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Sequence 1731 BP;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         The invention relates to a fungal derived indole derivative M-3-A with antifungal activity useful in the treatment of leaf spot of rice with M-3-A. The present sequence is that of the Bulgaria inquinans M-3 18S
                                                                                                                                                                                                                                       was used
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           WPI; 2002-002933/01
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Aldonic acid;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ABA01154;
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(OSAQ ) OSAKA CITY.
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                                                                                                                98.0%;
Similarity 97.6%;
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GCCCCGAAGGGCATTGGTTTTTTATCTAATAAATACACCCC
                                                                                                                                                                                                                                  to illustrate the present invention.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             DCCCCGAAGGGCATTGGTTTTTTATCTAATAAATACACCCC 41
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     standard; DNA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       GCCCCGAAGGGCATTGGTTTTTTATCTAATAAATACACCCC 158
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Page
                                                                                               Conservative
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                                                                                                                                                                                 447 A; 366 C; 459 G; 459 T; 0 other;
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Pred. No. 4.9e
1; Mismatches
                                                                                       Score 40.2; DB 24;
Pred. No. 4.9e-06;
1; Mismatches 0;
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                                                                                                                                      Length
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                                                                                            Indels
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156
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RESULT 5
AAQ73434
ID AAQ73434
AC AAQ
XX AAQ
DT 18-1
DT 18-1
XX Prol
KW Prol
KW Sace
KW wat.
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XX
Syn
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Matches
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  by a two-step polymerase chain reaction (PCR) amplification of any nucleic acid having a sequence essentially homologous to part of the 3'-end of the Aspergillus 18s rRNA gene using primers used in the first step that do not overlap with those in the second step. The method is used for early diagnosis, and monitoring, of aspergillosis, particularly invasive infections in hematological-oncological patients with long-term suppression of the immune system. Unlike the known method using overlapping primers, this process provides efficient and reliable detection of Aspergillus in clinical situations. It is specific for Aspergillus (it detects the species terreus, niger, versicolor, clavatus, other genera). This sequence represents the DNA sequence of Aspergillus find the specific represents the DNA sequence of Aspergillus find the specific represents the DNA sequence of Aspergillus find the specific represents the DNA sequence of Aspergillus find the specific represents the DNA sequence of Aspergillus find the specific represents the DNA sequence of Aspergillus find the specific represents the DNA sequence of Aspergillus find the specific represents the specific represents the sequence of Aspergillus find the specific represents the specific represents the sequence of Aspergillus find the specific represents t
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                                                          Probe; detection; Histoplasma capsulatum; 18S; rRNA; rDNA; hybridisation; Saccharomyces cerevisiae; fungus; phylogenetic; helper probe; soil; water; Blastomyces dermatitidis; quantitation; sample; body fluid; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Detecting Aspergillus nucleic acid in body samples by two-step polymerase chain reaction, for diagnosing aspergillosis
                                                                                                                                                           Histoplasma
                                                                                                                                                                                                        18-MAY-1995
                                                                                                                                                                                                                                                    AAQ73434;
                                                                                                                                                                                                                                                                                            AAQ73434 standard; DNA; 40
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Sequence 1733 BP; 446
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 invasive
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        fumigatus 18S RNA.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  (BUCH/) BUCHHEIDT D.
(HEHL/) HEHLMANN R.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Local
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   fumigatus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 invention describes a novel method for detecting Aspergillus nucleic (I) in a body sample which comprises the isolation of (I) followed
                                                                                                                                                                                                                                                                                                                                                                                                                197
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                   DCCCCGAAGGGCATTGGTTTTTTATCTAATAAATACACCCC 41
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               infection; haematology;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    diagnosis; 18S rRNA;
                                                                                                                                                    capsulatum hybridisation helper probe
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   18S TRNA DNA
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97.6%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         A; 374 C;
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                                                                                                                                                                                                                                                                                               ВÞ
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Score 40.2; DB 20
Pred. No. 4.9e-06;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Mismatches
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RESULT 6
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 A probe (AAQ73433) or its complement (AAQ73436) and corresponding RNA sequences (AAQ73437 and AAQ86436) used for the specific detection of all strains of Histoplasma capsulatum (H.C.). The probes are manufactured complementary to the H.C. 18s rRNA or rDNA gene. This region also corresponds to the bases 172-193 of Saccharomyces cerevisiae 18S rRNA. The probe is specific for H.C. and can be used to distinguish the fungus from all others, even its nearest phylogenetic neighbour Blastomyces dermatitidis. Nucleic acid hybridisation of the specific probe is enhanced by the use of helper probes (AAQ73434-5). This method allows the detection and/or the quantitation of H.C. from samples e.g. body
                     (NOVO)
                                                                                                                                                                                               Multiple gene expression; filamentous fungal cell; EST; expressed sequence tag; Fusarium venenatum; Aspergillus niger; Aspergillus oryzae; Trichoderma reesei; identification; recombination; culture condition; environmental stress; spore morphogenesis; metabolic pathway engineering; catabolic pathway engineering; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         US5352579-A.
                                                                                                                                                                        Fusarium venenatum.
                                                                                                                                                                                                                                                                                 Fusarium venenatum
                                                                                                                                                                                                                                                                                                                                         AAF08498;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Sequence 40 BP; 11 A; 11 C; 6 G; 12 T; 0 other;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Hybridisation probe specific for Histoplasma capsulatum - allowing differentiation from all other fungi for detection
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 04-OCT-1994.
                                                                22-MAR-1999;
                                                                                        22-MAR-2000;
                                                                                                                    28-SEP-2000
                                                                                                                                                WO200056762-A2
                                                                                                                                                                                                                                                                                                              13-MAR-2001
                                                                                                                                                                                                                                                                                                                                                                   AAF08498 standard; cDNA; 570
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           28-JUN-1991;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      28-JUN-1991;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                (GENP-) GEN-PROBE INC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            40;
                                                                                                                                                                                                                                                                                                                                                                                                                                                       2 CCCCGAAGGGCATTGGTTTTTTATCTAATAAATACACCCC
                      NOVO
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         tissue samples, soil and water.
                                                                                                                                                                                                                                                                                                                                                                                                                                      CCCCGAAGGGCATTGGTTTTTTATCTAATAAATACACCCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Conservative
                      NORDISK BIOTECH NORDISK AS.
                                                                                         2000WO-US07781
                                                                                                                                                                                                                                                                                                            (first entry)
                                                              99US-0273623
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          91US-0720587.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      910S-0720587.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    body fluids, etc.
                                                                                                                                                                                                                                                                                 EST SEQ ID NO:1021.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       100.0%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       97.6%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Score 40;
Pred. No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       DB 15;
3.8e-06;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Length 40
                                                                                                                                                                                                                                                                                                                                                                                                                                      40
                                                                                                                                                                                                                                                                                                                                                                                                                                                               41
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                õ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         0,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Gaps
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RM,

Rey MW,

Shuster JR,

Kauppinen

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Clausen

IG,

Olsen

PB;

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RESULT 7
AAF10913/C
ID AAF10913 standard; cDNA; 617
   PPAXR PONCE OF THE PPARR PRACE O
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        The present invention describes a method for monitoring differential CC expression of genes in a first filamentous fungal (FF) cell relative to cells. The method uses fluorescence-labeled nucleic acids isolated from the FF cells and a substrate of expressed sequence tags (EST). The ESTS care used in the methods for monitoring differential expression of genes in a first filamentous fungal (FF) cell relative to expression of the CC same genes in one or more second filamentous fungal cells. Monitoring the global expression of genes from FF cells allows the production potential of the microorganisms to be improved. New genes may be CC identified and gene copy number variation and stability can be cC identified and gene copy number variation and stability can be cC monitored. The expression of genes can be used to study how FF cells adapt to changes in culture conditions, environmental stress, spore cc morphogenesis, recombination, metabolic or catabolic pathway cc engineering. Using ESTs provides several advantages over genomic or caray equals one gene or open reading frame, and organisation of the cmirroarrays based on function of the gene products to facilitate canalysis of the results. AAF07478 to AAF11247 represents ESTs from Aspergillus or canalysis of the results. AAF07478 to AAF11247 represents ESTs from Aspergillus or canalysis of the canalysis represents ESTs from Trichoderma reesel, which are cc all specifically claimed in the present invention.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                Multiple gene expression; filamentous fungal cell; EST; expressed sequence tag; Fusarium venenatum; Aspergillus niger; Aspergillus oryzae; Trichoderma reesei; identification; recombination; culture condition; environmental stress; spore morphogenesis; metabolic pathway engineering; catabolic pathway engineering; ss.
   (NOVO)
                                                                                                                                                                                                                                                                                                                                                                  Fusarium venenatum.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        13-MAR-2001 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Fusarium venenatum EST SEQ ID NO:3436
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Monitoring differential expression of genes in filamentous fungal cells uses fluorescence-labeled nucleic acids isolated from the cells and a
                                                                                                 22-MAR-1999;
                                                                                                                                                                   22-MAR-2000; 2000WO-US07781
                                                                                                                                                                                                                                     28-SEP-2000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Claim
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   substrate of expressed sequence tags
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   328
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           2000-594572/56
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 86; Page 772; 3161pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    38;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1 DCCCCGAAGGGCATTGGTTTTTATCTAATAAATACACCCC 41
   NOVO
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             570 BP; 153 A; 136 C; 113 G; 166 T; 2 other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                GCCCCGAAGGGCATTGGTTTTTAATCTAATAAATACATCCC 368
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Conservative
NORDISK BIOTECH INC NORDISK AS.
                                                                                                 99US-0273623
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            90.2%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ; Score 37; DB; Pred. No. 7.4e
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             7.4e-05;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Length 570;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                0
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Sequence 617

BP; 155

A; 139 C; 140 G; 171 T; 12 other;

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CC expression of genes in a first flamentous fungal (FF) cell relative to cells. The method uses fluorescence-labeled nucleic acids isolated from the FF cells and a substrate of expressed sequence tags (EST). The ESTs CC are used in the methods for monitoring differential expression of genes in one or more second filamentous fungal (FF) cell relative to expression of the same genes in one or more second filamentous fungal cells. Monitoring CC the global expression of genes from FF cells allows the production of genes from FF cells allows the production of genes from FF cells allows the production of genetatial of the microorganisms to be improved. New genes may be considered, possible functions of unknown open reading frames can be discovered, possible functions of unknown open reading frames can be considered, and gene copy number variation and stability can be morphogenesis, recombination, metabolic at but how FF cells adapt to changes in culture conditions, environmental stress, spore compineering. Using ESTs provides several advantages over genomic or random cDNA clones including elimination of redundancy as one spot on an array equals one gene or open reading frame, and organisation of the microarrays based on function of the gene products to facilitate can be spot on function of the gene products are from the first from Aspergillus or parallals and represents ESTs from Aspergillus oryzae; and can array equals one gene or open reading frame, and organisation of the gene products of facilitate and stream venenatum; AAF14878 represents ESTs from Aspergillus oryzae; and can array equals or a spot of the search and stream are seal, which are constant and the presents ESTs from Aspergillus oryzae; and can all specifically claimed in the present invention.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         The present invention describes a method for monitoring differential expression of genes in a first filamentous fungal (FF) cell relative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Claim 86; Page 1589; 3161pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Monitoring differential expression of genes in filamentous fungal cells uses fluorescence-labeled nucleic acids isolated from the cells and a substrate of expressed sequence tags -  \frac{1}{2} \int_{-\infty}^{\infty} \frac{1}{2} \left( \frac{
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Berka
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       RM,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Rey MW,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Shuster JR,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Kauppinen
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ß
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               IJ,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Olsen PB;
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Query Match Best Local Matches 219 Similarity GCCCCGAAGGGCATTGGTTTTTAATCTAATAAATACATCCC Conservative 90.2%; 1: Score 37; Pred. No. Mismatches DB Length 617; Indels 179 0 Gaps 0

밁 Q

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RESULT 8
ABA01152/c
                                                                                                                   Deuteromycetes polynucleotide
                                                                                                                                24-JAN-2002 (first entry)
                                                                                                                                                            ABA01152 standard; DNA; 1745 BP
            (TAKE-) TAKEHARA KAGAKU KOGYO (OSAQ ) OSAKA CITY.
                                 27-DEC-1999;
                                              26-DEC-2000; 2000JP-0394766
                                                             11-SEP-2001
                                                                           JP2001245657-A
                                                                                        Deuteromycetes
                                                                                                      Aldonic acid; ds.
                                                                                                                                                ABA01152;
                                                                                        gp
                                 99JP-0369714.
                                                                                                                    SEQ
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RESULT 9
AAS16211 standard; D
XX
AAS16211;
XX

AC AAS16211;
XX

DT 29-JAN-2002 (first
XX

Gibberellin; l8s rRN;
KW ITS2; 5.8s rRN; LTB
KW ITS2; 5.8s rRN; LTB
KW russet control; fung
OS Gibberella fujikuroi
XX

FIT misc_feature 1:.1
FT misc_feature 1775
FT misc_feature 2079
FT misc_feature 2079
FT misc_feature 2079
FT misc_feature 2244
FT misc_feature 2244
FT misc_feature 2244
FT misc_feature 2079
FT misc_feature 2244
FT misc_feature 2079
FT misc_feature 2000Us-
XX
PD 11-SEP-2001.
XX
PF 23-AUG-2000; 2000US-
XX
PF 23-AUG-1999; 99US-
XX
PF 31-AUG-1999; 99US-
XX
AUG-1990; AUG-1990; AUG-1990; AUG-1990; AUG-1990; AUG-1990; AUG-1990; AUG-1990; A
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 The present invention relates to a new microbe of Acinetobacter or Burkholderis genus producing aldonic acid and oxidising specifically hemiacetal hydroxy group of a saccharide having said hydroxy group. Aldonic acid is used as a mineral reinforcing agent. The present seques used to illustrate the present invention.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Gibberellin; 18S rRNA; internal transcribed spacer region; ITS1 ITS2; 5.8S rRNA; LTB-1027; species differentiation; GA_4; GA_3; flowering; fruit cell elongation; apple; pear; grape; fruit;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Disclosure; Page 17;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Acinetobacter
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                A new
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Sequence 1745 BP;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Gibberella fujikuroi.
       new method for producing a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  211
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       microbe for producing aldonic tobacter or Burkholderis
                                                   2001-662197/76.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       38;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      control; fungus;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Similarity
                                                                                                                                        GALLAZZO J L.
LEE M D.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                GCCCCGAAGGGCATTGGTTTTTAATCTAATAAACACACCCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             (first entry)
                                                                                                                                                                                                                                                         2000US-0645073
                                                                                                Lee MD
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          /"Lag" a
/note= "18S rRNA gene"
1775..1921
/**-
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  DNA spanning
                                                                                                                                                                                                            99US-151770P
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                       /note= "ITS2 region"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       /note= "5.8S rRNA gene"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         /note= "ITS1 region"
                                                                                                                                                                                                                                                                                                                                                                                                                                     2244..2293
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      .922..2078
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              448 A; 382 C;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      DNA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            90.2%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            22pp; Japanese
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ..2243
                                                                                                                                                                                                                                                                                                                                                                                        "28S rRNA gene"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        dg.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  18S,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Score 37; DB
Pred. No. 8.4e
1; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ₽₽
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              465 G;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     5.88
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                acid, comprises
         of.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              450 T; 0 other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               DB 24;
8.4e-05;
       gibberellins
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     28S rRNA and ITS sequences
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Length 1745;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             41
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   þ
           from
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   new strain
           Gibberella
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     GA_7;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   of.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 the
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         0
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mixture

Query Match Best Local Similarity Matches 37; Conserv

Conservative

0

Score 35.8; DB 19 Pred. No. 0.00024; 0; Mismatches 2

19;

Indels Length

0;

Gaps

0

87.3%; 94.9%;

Sequence

1771

BP;

438

A; 377

C; 477 G;

461 T; 18

other;

can be

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                                                                                                                                                                                                                                                                                                                                                                                                                                            XXXX
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                RESULT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   AAV61668/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Best
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     This sequence represents a genomic DNA sequence containing the 18s rRNA gene, internal transcribed spacer regions 1 and 2 (ITS1, ITS2) and 5.8s rRNA sequences from a mutant strain of Gibberella fukikoroi (LTB-1027) of the invention. This region of DNA is highly variable and can be used for species and strain differentiation. The LTB-1027 mutant produces a mixture of gibberellins which is at least 70 % GA_4 and GA_7. Gibberellins GA_4 and GA_7 promote flowering and fruit cell elongation, and are used by growers of apples, pears and grapes to produce larger fruits and earlier harvests. The mixture of GA_3, GA_4 and GA_7 achieved using the method of this invention should be particularly useful in the apple industry where GA_4 has been found more effective in russet control and in promoting fruit set. This method produces GA_4 and GA_7 in much higher titers than prior art methods.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               fujikuroi results in high titers of GA4 and flowering and fruit growth in the fruit grow
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Sequence
                                                                                                                                  Use of oligo:nucleotide for detecting and of Fusarium genus - as primer or probe to
                                                                                                                                                                                                                                                                                                                    JP10234380-A
                                                                                                                                                                                                                                                                                                                                              Fusarium oxysporum
                                                                                                                                                                                                                                                                                                                                                                           185
                                                                                                                                                                                                                                                                                                                                                                                                     Fusarium
                                                                                                                                                                                                                                                                                                                                                                                                                               03-DEC-1998
                                                                                                                                                                                                                                                                                                                                                                                                                                                          AAV61668;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    AAV61668 standard;
                          This DNA sequence encodes a fragment of a Fusarium oxysporum f.sp. fragaria 185 rRNA gene which is used in a method for the detection and identification of a fungus of Fusarium genus. The process can used to detect or identify microbes rapidly and exactly.
                                                                                                                                                                                                                                                                                        08-SEP-1998
                                                                                                                         microbes
                                                                                                                                                                               WPI; 1998-535034/46.
                                                                                                                                                                                                                                    28-FEB-1997;
                                                                                                                                                                                                                                                              28-FEB-1997;
                                                                                              Example 1;
                                                                                                                                                                                                       (SHIN-) SHINKINRUI KINO KAIHATSU KENKYUSHO
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                10
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Local
                                                                                                                                                                                                                                                                                                                                                                         rRNA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       211
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1 DCCCCGAAGGGCATTGGTTTTTTATCTAATAAATACACCCC 41
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            38;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       oxysporum f.sp.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  2293 BP; 596 A; 527
                                                                                                                      rapidly and exactly
                                                                                                                                                                                                                                                                                                                                                                         detection;
                                                                                              Page 7-8; 20pp;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                               (first
                                                                                                                                                                                                                                    97JP-0062104
                                                                                                                                                                                                                                                              97JP-0062104
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      DNA;
                                                                                                                                                                                                                                                                                                                                                                                                                               entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        90.2%;
                                                                                                                                                                                                                                                                                                                                                                           identification;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1771
                                                                                                                                                                                                                                                                                                                                                                                                   fragaria 18S rRNA DNA fragment.
                                                                                              Japanese.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Score
Pred.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  C; 592 G;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ВP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        37;
                                                                                                                                                                                                                                                                                                                                                                         fungus;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        DB 23;
8.7e-05;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  578 T; 0 other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    growing
                                                                                                                                        identification of fungus detect of identify
                                                                                                                                                                                                          ĸ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  GA7 useful to
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ν
γ:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Length 2293;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     industry
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          171
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 promote
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              0
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5

41

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RESULT 11
ABK49559/c
ID ABK49559/c
AC ABK495
XX ABK495
XX Putref
XX Putref
XX Putref
KW Paper-
KW da.

OS Phleb1
XX JP2001
XX JP2001
XX JP2001
XX JP2001
XX PO6-OC7
XX O6-OC7
XX WPI; ;
XX WPI; ;
XX WPI; ;
XX Claim
XX Cla
                                                                                                                                                                                                                                                                                                                                                                           RESULT 12
AAV60107/c
     Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Query Match
Best Local S
Matches 34
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          밁
                                                                                                                                                                                       Rhizoctonia solani 18s rRNA gene sequence.
08-SEP-1998
                                            JP10234381-A
                                                                                              Rhizoctonia solani.
                                                                                                                                             Detection; identification;
                                                                                                                                                                                                                                                26-NOV-1998
                                                                                                                                                                                                                                                                                                     AAV60107;
                                                                                                                                                                                                                                                                                                                                                 AAV60107 standard;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            The invention describes a white putrefactive microbe having halotolerant manganese peroxidase activity. The microbe strain can be used in the paper-pulp industry, dyeing industry, and process of treating industrial waste. This sequence represents a putrefactive microbe associated
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Sequence 1734 BP; 444 A; 348
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Claim 4; Page 9; 11pp; Japanese.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         New microbe for decomposing substances and bleaching pulps, comprises microbe that produces halotolerant manganese peroxidase -
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Note: This sequence does not encode the peptide shown in
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             06-OCT-1999;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          06-OCT-2000;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            26-JUN-2001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             JP2001169775-A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Phlebia sp.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   paper-pulp
ds.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Putrefactive microbe; halotolerant; manganese peroxidase; paper pulp industry; dyeing industry; industrial waste treatment;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      (MEIJ ) MEIJI SEIKA KAISHA LTD
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Putrefactive microbe associated polynucleotide
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 15-JUL-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ABK49559;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ABK49559 standard; DNA; 1734 BP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            215
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          2001-608873/70
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          229
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             34;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              G
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              CGAAGGGCATTGGTTTTTTATCTAATAAATACACCCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CGAACCGCGTTGGTTTTTTATCTAATAAATACACCCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               CCCGAAGGGCATTGGTTTTTATCTAATAAATACACCCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Conservative
                                                                                                                                                                                                                                              (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          2000JP-0307045
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           99JP-0285955.
                                                                                                                                                                                                                                                                                                                                              DNA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             78.5%;
                                                                                                                                                                                                                                                                                                                                                 1793
                                                                                                                                          fungus; 18s rRNA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Score 32.2; DB 23; Pred. No. 0.006; 0; Mismatches 3;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      C; 467 G;
                                                                                                                                                                                                                                                                                                                                                 ВP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 475 T; 0 other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   41
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     191
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1734;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     AAU79900
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                0
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Query Match Best Local S Matches 34

Similarity 34; Conserv

Conservative

0

Score 32.2; DB Pred. No. 0.006; 0; Mismatches

ü

0

Gaps

0

DB 19;

Length Indels

1904;

78.5%; 91.9%;

Sequence 1904 BP;

491 A; 400 C; 497 G; 514 T; 2 other;

The present sequence appears in the specification, which describes oligonucleotide probes for detecting or identifying of a fungus of Rhizoctonia genus. The sequences are derived from the 18s rRNA genus sequence, and are unique to Rhizoctonia species.

gene

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RESULT 13
AAV60108/c
                                                                                                                                                                                                                                                                                                                                                                                                              Ş
                                                                                                                                                                                                                                                                                                                                                                                              밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Query Match
Best Local Similarity
Matches 34; Conserv
                                                                                     exactly
                                                                                            Use of oligo:nucleotide:
                                                                Example 1; Page 9; 24pp; Japanese.
                                                                                                                           WPI; 1998-535035/46
                                                                                                                                                                28-FEB-1997;
                                                                                                                                                                                    28-FEB-1997;
                                                                                                                                                                                                                           JP10234381-A.
                                                                                                                                                                                                                                             Rhizoctonia solani.
                                                                                                                                                                                                                                                              Detection; identification; fungus; 18s rRNA;
                                                                                                                                                                                                                                                                              Rhizoctonia solani 18s rRNA gene sequence.
                                                                                                                                                                                                                                                                                                      26-NOV-1998
                                                                                                                                                                                                                                                                                                                                          AAV60108 standard; DNA; 1904
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      The present sequence appears in the specification, which doligonucleotide probes for detecting or identifying of a f Rhizoctonia genus. The sequences are derived from the 18s sequence, and are unique to Rhizoctonia species.
                                                                                                                                            (SHIN-) SHINKINRUI KINO KAIHATSU
                                                                                                                                                                                                        08-SEP-1998.
                                                                                                                                                                                                                                                                                                                           AAV60108;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Sequence 1793 BP;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Use of oligo:nucleotide for detecting or identifying fungus of Rhizoctonia genus - used to detect or identify fungus rapidly and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                exactly
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Example 1; Page 8;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    (SHIN-) SHINKINRUI KINO KAIHATSU KENKYUSHO
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          28-FEB-1997;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             28-FEB-1997;
                                                                                                                                                                                                                                                                                                                                                                                            231
                                                                                                                                                                                                                                                                                                                                                                                                                G
                                                                                                                                                                                                                                                                                                                                                                                                    CGAAGGGCATTGGTTTTTTTATCTAATAAATACACCCC
                                                                                                                                                                                                                                                                                                                                                                                          CGAACCGCGTTGGTTTTTTATCTAATAAATACACCCC 195
                                                                                                                                                                                                                                                                                                                                                                                                                                 Conservative
                                                                                                                                                                                                                                                                                                    (first entry)
                                                                                                                                                                 97JP-0062106.
                                                                                                                                                                                   97JP-0062106.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         97JP-0062106
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            97JP-0062106
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      460 A; 363 C; 463 G; 490 T; 17 other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        24pp; Japanese.
                                                                                                                                                                                                                                                                                                                                                                                                                                          78.5%;
91.9%;
                                                                                             d to
                                                                                             detecting
detect or
                                                                                                                                                                                                                                                                                                                                                                                                                                 0
                                                                                                                                                                                                                                                                                                                                           ВP
                                                                                                                                                                                                                                                                                                                                                                                                                             Score 32.2; DB 19;
Pred. No. 0.006;
0; Mismatches 3;
                                                                                                                                           KENKYUSHO
                                                                                         or identifying fungus of identify fungus rapidly and
                                                                                                                                            X
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     줐
                                                                                                                                                                                                                                                              88
                                                                                                                                                                                                                                                                                                                                                                                                            41
                                                                                                                                                                                                                                                                                                                                                                                                                                                 Length
                                                                                                                                                                                                                                                                                                                                                                                                                               Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           describes fungus of
                                                                                                                                                                                                                                                                                                                                                                                                                                                 1793;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               rRNA gene
                                                                                                                                                                                                                                                                                                                                                                                                                              0;
                                                                                                                                                                                                                                                                                                                                                                                                                              Gaps
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Best Local Matches 2

Similarity

96.78;

Pred. No. 0.08;

Mismatches

0;

Indels

0;

Gaps

ç

Conservative

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RESULT 14
AAF11316/c
ID AAF11316/c
ID AAF11316/c
ID AAF11313
ACC AAF113
ACC AAF113
XX Multip
KW Multip
KW Expres
KW Asperg
KW Asperg
KW Asperg
KW Mo2000
OS Asperg
FW WO2000
OS Asperg
FW WO2000
OS Asperg
CO ASPERA
XX HOVO
PD 28-SEP
XX HOVO
PF 22-MAR
XX HOVO
PF 22-MAR
XX CHOVO
PF 22-MAR
XX HOVO
PF 22-MAR
XX CHOOLIT
CC The pr
CC Expres
CC CLim
CC The FF
CC Expres
CC The FF
CC Th
                                            the FF cells and a substrate of expressed sequence tags (EST). The ESTs CC are used in the methods for monitoring differential expression of genes CC in a first filamentous fungal (FF) cell relative to expression of genes CC same genes in one or more second filamentous fungal cells. Monitoring CC the global expression of genes from FF cells allows the production CC potential of the microorganisms to be improved. New genes may be CC discovered, possible functions of unknown open reading frames can be CC identified and gene copy number variation and stability can be CC monitored. The expression of genes can be used to study how FF cells adapt to changes in culture conditions, environmental stress, spore CC morphogenesis, recombination, metabolic or catabolic pathway CC engineering. Using ESTs provides several advantages over genomic or random cDNA clones including elimination of redundancy as one spot on an CC carray equals one gene or open reading frame, and organisation of the CC microarrays based on function of the gene products to facilitate analysis of the results. AAPO1478 to AAF11853 represents ESTs from Aspergillus organisation of catafiles to facilitate analysis of the results. AAPO1478 to AAF11853 represents ESTs from Aspergillus organisation of catafiles to AAF11879 to AAF11879 from Trichoderma reesei, which are CC all specifically claimed in the present invention.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            õ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           The present invention describes a method for monitoring differential expression of genes in a first filamentous fungal (FF) cell relative to expression of the same genes in one or more second filamentous fungal cells. The method uses fluorescence-labeled nucleic acids isolated from
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Monitoring differential expression of genes in filamentous fungal cells uses fluorescence-labeled nucleic acids isolated from the cells and a substrate of expressed sequence tags -
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Claim 87; Page 1718; 3161pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Berka RM,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               wultiple gene expression; filamentous fungal cell; EST; expressed sequence tag; Fusarium venenatum; Aspergillus niger; Aspergillus oryzae; Trichoderma reesei; identification; recombination; culture condition; environmental stress; spore morphogenesis; metabolic pathway engineering; catabolic pathway engineering; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                WO200056762-A2
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               22-MAR-1999;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           5
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Query Match

Sequence 1024

BP;

275 A;

204 C;

275 G; 269 T; 1 other;

Job time : 210.995 secs

2003, 01:44:09

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71.2%;

Score 29.2;

B

21;

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AAQ71867/c
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                                                                                                                                                                                                                          Query Match
Best Local S
Matches 29
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          The gene sequence of the small ribosomal subunit RNA of arbuscular endomycorrhizal fungi obtained from Glomus vesiculiferum, Glomus intraradices and Gigaspora margarita were compared with that of a non-arbuscular endomycorrhizal fungus, Endogone pisiformis,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          New oligonucleotide probes - used for the detection of arbuscular endomy
corrhizal fungi in plant root samples % \left( 1\right) =\left\{ 1\right\} =\left\{ 
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            G. vesiculiferum small ribosomal subunit RNA
                                                                                                                                                                                                                                                                                                                                                                                                                                               Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Disclosure; Page 18; 40pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  WPI; 1994-264577/33
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Lalonde M,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     23-DEC-1992;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     AAQ71867 standard;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            23-DEC-1992;
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                                                                                                                                                                                                                                                                        Similarity
                                                               ATTGGTTTTTTATCTAATAAATACACCCC 41
                                                                                                                                                                                                                                                                                                                                                                                                                                                     447
ATTGGTTTTTTATCTAATAAATACACCCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            to design taxon specific primers/probes
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ilarity 100.0%;
Conservative (
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                                                                                                                                                                                                                                                                                                                                                                                                                                    A; 86 C; 107 G; 118 T; 1 other;
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                                                                                                                                                                                                                                                                        Score 29; Pred. No.
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d. No. is the number of results predicted by chance to have a
re greater than or equal to the score of the result being printed,
is derived by analysis of the total score distribution.
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(without alignments)
319.658 Million cell updates/sec
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Sequence 3, Appli
Sequence 1, Appli
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Sequence 6, Appli
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Sequence 178, Appli
Sequence 281, Appli
Sequence 25, Appli
Sequence 27, Appli
Sequence 27, Appli
Sequence 28, Appli
Sequence 28, Appli
Sequence 30, Appli
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Description
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US-07-720-587A-3
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US-07-720-587A-3
                                                                                                                                                                                                                                                                                                                                                                                                                                 COMPUTER: IBM PS/2 Model 502 or 55xx

OPERATING SYSTEM: IBM P.C. DOS (Version 3.30)

SOFTWARE: WordPerfect (Version 5.0)

CURRENT APPLICATION DATA:

APPLICATION UMMBER: US/07/720,587A

FILING DATE: 19910628

CLASSIFICATION: 435

PRIOR APPLICATION DATA:

PRIOR APPLICATION DATA:

PRIOR APPLICATION DATA: including application
PRIOR APPLICATION DATA: described below:

APPLICATION NUMBER:

FILING DATE:

ATTORNEY/AGENT INFORMATION:

REGISTRATION NUMBER: 32,327

PEPPERENCE FORCKET NUMBER: 193/121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
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                                 Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Patent No. 5332...
Patent No. 5332...
GENERAL INFORMATION:
GENERAL INFOR
                                                                                                                                                                                                                                                                                         TELEFAX: (213) 955-0440
TELEX: 67-3510
INFORMATION FOR SEQ ID NO:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              REFERENCE/DOCKET NUMBER: 19
TELECOMMUNICATION INFORMATION:
TELEPHONE: (213) 489-1600
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   COMPUTER READABLE FORM:
MEDIUM TYPE: 3.5" Diskette, 1
MEDIUM TYPE: 1BM PS/2 Model 50Z
COMPUTER: IBM PS/2 Model 50Z
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TITLE OF INVENTION: NUMBER OF SEQUENCES: 3
CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                SEQUENCE CHARACTERISTICS
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CITY: Los Angeles
STATE: California
COUNTRY: USA
                                                                                                                                                                                    STRANDEDNESS:
                                                                                                                                                                                                                                         LENGTH:
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                      Similarity 100
40; Conservative
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611 West Sixth
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linear
                                                  97.6%; Score 40; 100.0%; Pred. No.
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TO HISTOPLASMA CAPSULATUM
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US-07-879-540A-30
US-07-879-594A-30
US-07-879-469A-30
US-07-879-469A-28
US-07-879-469A-29
US-07-879-640A-29
US-07-879-640A-29
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US-07-879-469A-24
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                                                    DB 1;
1.4e-(
                                                  .4e-06;
                      0;
                                                                        Length 40;
                      Indels
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Result

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Score

Query Match

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US-07-720-587A-3
US-08-645-073-1
US-08-867-82073-1
US-08-093-144-3
US-08-093-144-3
US-08-093-144-4
US-08-093-416-178-1
US-08-998-416-952
US-08-998-416-952
US-07-879-647A-25
US-07-879-640A-25
US-07-879-640A-25
US-07-879-640A-25
US-07-879-647A-28
US-07-879-647A-30
US-07-879-544A-30
US-07-879-544A-30
US-07-879-444A-30
US-07-879-444A-38
US-07-879-444A-38

Maximum

DB seq

length: 0 length: 2000000000

Minimum

Post-processing:

Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries

Database

Issued_Patents_NA:*

1: /cgn2_6/ptodata/1,

2: /ggn2_6/ptodata/1,

3: /cgn2_6/ptodata/1,

4: /cgn2_6/ptodata/1,

5: /cgn2_6/ptodata/1,

6: /cgn2_6/ptodata/1,

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/cgn2_6/ptodata/1/ina/backfiles1.seq:*

Total number

of hits satisfying chosen parameters:

441362 seqs, 153338381 residues

Searched:

Scoring table: Sequence: Title: Perfect score:

IDENTITY_NUC Gapop 10.0 , Gapext 1.0

US-09-674-195C-16 41

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nucleic search, using sw model

GenCore version 5.1.6 Copyright (c) 1993 - 2003 Compugen

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SEQ ID NO 1

: LENGTH: 2293

: TYPE: DAY

: ORGANISM: Gibberella fujikuroi

US-09-645-073-1
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US-09-645-073-1/c
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Sequence 1, Application US/09645073 Patent No. 6287800
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Sequence 1, Application US/08867820A Patent No. 5891685
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               FILE REFERENCE: L02-01NP
CURRENT APPLICATION NUMBER: US/09/645,073
CURRENT FILING DATE: 2000-08-25
PRIOR APPLICATION NUMBER: US 60/151,770
PRIOR FILING DATE: 1999-08-31
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     APPLICANT: Lee, May
APPLICANT: Galazzo, Jorge
TITLE OF INVENTION: Produ
FILE REFERENCE: L02-01NP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                PRIOR FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                SOFTWARE:
                               INFORMATION FOR SEQ ID NO: 1:
                                           ATTORNEY/AGENT INFORMATION:
NAME: Lee Cheng
REGISTRATION NUMBER: 40,949
REFERENCE/DOCKET NUMBER: 1416
TELECOMMUNICATION INFORMATION:
TELEPHONE: 202-721-8250
TELEPAX: 202-721-8250
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        APPLICANT:
APPLICANT:
APPLICANT:
                                                                                                                                                                                                                         SOFTWARE: Wordperfect 5.1 CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                             COMPUTER READABLE FORM: MEDIUM TYPE: Diskette, 3.5 inch,
            SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                 APPLICANT: OHARA AK1KO
TITLE OF INVENTION: METHOD FOR PRODUCING ESTER OF (S)- -HALOGENATED- -HYDROXYBUTY
NUMBER OF SEQUENCES: 57
                                                                                                                                                                                                                                                                                                                                                                                                                  CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                  STREET: 2033 A C. CITY: Washington, D.C.
                                                                                                                                                                      APPLICATION NUMBER: US/08/867,820A FILING DATE: June 3, 1997 CLASSIFICATION: 435
                                                                                                                                                                                                                                                        COMPUTER: IBM PC compatible OPERATING SYSTEM: PC-DOS/MS-DOS
                                                                                                                                                                                                                                                                                                                                                COUNTRY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Local Similarity
les 38; Conserv
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   211 GCCCCGAAGGGCATTGGTTTTAATCTAATAAATACATCCC 171
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               INFORMATION:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  PatentIn version 3.0
                                                                                                                                                                                                                                                                                                                                                                                 2033 K Street, N.W., Suite 800
                                                                                                                                                                                                                                                                                                                                                USA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        MIKAWA Takashi
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        HARA Mari
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Conservative
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       90.28;
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pred. No. 2.8e-05;
l; Mismatches 2;
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US-08-093-144-3/c
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RESULT
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Patent No. 543404
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                                                                                                                                                      Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                 TELEPHONE: (202) 861-30
TELEFAX: (202) 822-0944
TELEX: 6714627 CUSH
TELEX: 6714627 CUSH
THEORMATION FOR SEQ ID NO:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              MOLECULE TYPE:
ORIGINAL SOURCE:
                                                                                                                                                                                                                                                                                                                                                                                                  APPLICATION NUMBER: US 07
FILING DATE: 15-AUG-1991
ATTORNEY AGENT INFORMATION:
NAME: Hymo, Lawrence A.
REGISTRATION NUMBER: 19.0
                                                                                                                                                                                                                                                            SEQUENCE CHARACTERISTICS:
LENGTH: 439 base pairs
                                                                                                                                                                                                                                                                                                                                                REFERENCE/DOCKET NUMBER: LA TELECOMMUNICATION INFORMATION: TELEPHONE: (202) 861-3000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CLASSIFICATION: 435
PRIOR APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TITLE OF INVENTION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            APPLICANT: SIMON, LUC
APPLICANT: LALONDE, MAURICE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 STREET: Eleventh
CITY: Washington
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TOPOLOGY:
                                                                                                                                                                                                                           TYPE: nucleic acid
STRANDEDNESS: double
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   COUNTRY: U.S.A. ZIP: 20036-5601
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                STRANDEDNESS:
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                                                                                                                                       Local
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1 Similarity 86.8%;
33; Conservation
                                                                                  13
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EDNESS: double
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COMPUTER READABLE FORM:
MEDIUM TYPE: Tape
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS SOFTWARE: PatentIn Release #1.0, Version #1.25 CURRENT APPLICATION DATA: APPLICATION NUMBER: US/08/093,144 FILING DATE: 234 CCCGAAGGCATTGATTTTTATCTAATAAATACATCCC 197 114 ATTGGTTTTTTATCTAATAAATACACCCC 86 4 CCGAAGGGCATTGGTTTTTTATCTAATAAATACACCCC 41 h 70.7%; Score 29; Similarity 100.0%; Pred. No. 29; Conservative 0; Mismatc ATTGGTTTTTTATCTAATAAATACACCCC 41 E: CUSHMAN, DARBY & CUSHMAN Eleventh Floor, 1615 L. Street, N.W. DNA PROBES FOR THE DETECTION OF US 07/745,192 Score 30; DB 2; Pred. No. 0.011; LAH/3122/92223/MJW Mismatches ENDOMYCORRHIZAL FUNGI Mismatches DB 1; 0.021; 5; Indels Length 1788; 0 Length 439; Indels 0 0 Gaps Gaps

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RESULT 6
US-08-093-144-6/c
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                                                                                                                                                                                                                                                       Sequence 6,
Patent No.
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                                                                                                                                                                                                                      GENERAL INFORMATION:
APPLICANT: SIMON, LUC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TELEFAX: (202) 822-094
TELEX: 6714627 CUSH
INFORMATION FOR SEQ ID NO:
COUNTRY: U.S.A.
ZIP: 20036-5601
COMPUTER READABLE FORM:
MEDIUM TYPE: Tape
COMPUTER: IBM PC compatible
                                                                                                             CORRESPONDENCE ADDRESS:
ADDRESSEE: CUSHMAN, DARBY & CUSHMAN
STREET: Eleventh Floor, 1615 L. Street, N.W
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 REFERENCE/DOCKET NUMBER: LAH/3122/92223/MJW
TELECOMMUNICATION INFORMATION:
TELEPHONE: (202) 861-3000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           CLASSIFICATION: 435
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 0.
FILING DATE: 15-AUG-1991
ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                         APPLICANT: LALONDE, MAURICE
TITLE OF INVENTION: DNA PROBES FOR THE DETECTION OF
TITLE OF INVENTION: ARBUSCULAR ENDOMYCORRHIZAL FUNGI
                                                                                                                                                                                                           APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    COMPUTER: IBM PC compatible OPERATING SYSTEM: PC-DOS/MS-DOS SOFTWARE: Patentin Release #1.0, CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 COMPUTER READABLE FORM:
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APPLICANT: LALONDE, MAURICE
TITLE OF INVENTION: DNA PROBES FOR THE DETECTION OF
TITLE OF INVENTION: ARBUSCULAR ENDOMYCORRHIZAL FUNGI
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           NUMBER OF SEQUENCES: 2
CORRESPONDENCE ADDRESS:
                                                                                                                                                               NUMBER OF SEQUENCES:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  STREET:
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                                                                                                                                                                                                                                                                                                                                                                                                                              Local
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        LENGTH:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 MEDIUM TYPE: Tape
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ADDRESSEE:
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    Application US/08093144
    5434048

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29; Conserv
                                                                                                Washington
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20036-5601
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                                                                                    D.C.
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                                                                                                                                                                                                                                                                                                                                                                                                                Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     INFUMER: 19,057
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           double
                                                                                                                                                                                                                                                                                                                                                                                                         70.7%; 50.
100.0%; P7
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Pred. No.
                                                                                                                                                                                                                                                                                                                                                                                                              Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                             NO.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Version #1.25
                                                                                                                                                                                                                                                                                                                                                                                                                           DB 1; Length 446; 0.021;
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US-08-949-770-1/c
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                                                                                                                                                                                                                                                                                                                                                                                                                    Patent No. 6063604
NUMBER OF SEQUENCES: 4
CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Sequence 1, Application Patent No. 6063604
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Query Match
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              GENERAL INFORMATION:
APPLICANT: Wick,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       INFORMATION FOR SEQ ID NO:
TELECOMMUNICATION INFORMATION:
TELEPHONE: 312/474-6300
TELEFAX: 312/474-0448
                                                                                                                                                                                                                                                                                      COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
                                                                                 ATTORNEY/AGENT INFORMATION: NAME: Pochopien, Donald J.
                                                                                                                                                 CLASSIFICATION: 435
PRIOR APPLICATION DATA:
                                                                                                                                                                                                                    CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TITLE OF INVENTION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          APPLICANT: Mueller, Reinhold APPLICANT: Blassak, Michele
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     REGISTRATION NUMBER: 19,057
REFERENCE/DOCKET NUMBER: LA
TELECOMMUNICATION INFORMATION:
TELEPHONE: (202) 861-3000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         APPLICATION NUMBER: US 0 FILING DATE: 15-AUG-1991 ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        PRIOR APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              SOFTWARE: PatentIn Release #1.0, Version #1.25 CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         SEQUENCE CHARACTERISTICS
                                                                                                                                                                                                                             COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.25
                                              NAME: Pochopien, Donald J.
REGISTRATION NUMBER: 32,167
REFERENCE/DOCKET NUMBER: 28003/33045
                                                                                                                                   APPLICATION NUMBER:
                                                                                                                                                                                    APPLICATION NUMBER: FILING DATE:
                                                                                                                                                                                                                                                                                                                                           COUNTRY:
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TELEX: 6714627 CUSH
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60606-6402
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                                                                                                                                                                                                                                                                                                                                                                                     6300 Sears Tower,
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00 Sears Tower, 233
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93.3%;
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                                                                                                                                   08/617,045
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South Wacker Drive
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; ORGANISM:
US-08-998-416-178
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Best Local Similarity
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                                                                                                                      TELEFAX: 919-541-8689
INFORMATION FOR SEQ ID NO:
SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       tent No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            APPLICANT:
APPLICANT:
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                                                                                                                                                                                                                                                                                                                                                   COMPUTER: IBM PC COMPATIBLE
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PATENTIA PELEABO #1.0,
CURRENT APPLICATION DATA:
                            MOLECULE TYPE:
ORIGINAL SOURCE:
                                                                                                                                                                                                                                                                                                                                                                                                              COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              MOLECULE TYPE: DNA
                                                                                                                                                                     TELECOMMUNICATION INFORMATION: TELEPHONE: 919-541-8587
                                                                                                                                                                                                                             ATTORNEY/AGENT INFORMATION:
NAME: Meigs, J. Timothy
                                                                                                                                                                                                                                                                                        APPLICATION NUMBER: UFILING DATE: 24-DEC-1CLASSIFICATION: 435
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TITLE OF INVENTION:
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OTHER INFORMATION: /- "18s rRNA gene of Cryptosporidium
OTHER INFORMATION: parvum"
                                                            STRANDEDNESS:
TOPOLOGY: 11
                                                                                                                                                                                               REGISTRATION NUMBER: 38,241
REFERENCE/DOCKET NUMBER: PF/5-30306/A/CGC1976
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         STREET:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TYPE: nucleic acid
                                                                                                                                                                    TELEPHONE:
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                                                                                                      ENGTH:
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o. 6239264
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                                                                                      nucleic acid
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Research Triangle Park
NO. 6239264th Carolina
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Pohlmann, Rainer
Steiner, Sabine
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Knechtle, Philipp
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                                            DNA (genomic)
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79.5%;
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Pred. No. 0.
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RESULT 10
US-08-998-416-952
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Best Local S
Matches 29
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Best Local Similarity
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INFORMATION FOR SEQ ID NO:
                                                                                                                                                                                                                      MOLECULE TYPE:
ORIGINAL SOURCE:
                                                                                                                                                                                                                                                                                                  SEQUENCE CHARACTERISTICS:
LENGTH: 709 base pairs
                                                                                                                                                                                                                                                                                                                                                NAME: Meigs, J. Timothy
REGISTRATION NUMBER: 38.241
REFERENCE/DOCKET NUMBER: PF
TELECOMUNICATION INFORMATION:
TELEPHONE: 919-541-8587
TELEPAX: 919-541-8689
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      CLASSIFICATION: 435
PRIOR APPLICATION DATA:
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MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
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APPLICANT: Knechtle, Philipp
APPLICANT: Rebischung, Corinne
TITLE OF INVENTION: GENOMIC DNA SEQUI
TITLE OF INVENTION: AND USES THEREOF
NUMBER OF SEQUENCES: 1152
                                                                                                                                                                                                                                                                                                                                                                                                                                       FILING DATE: 31-DEC-1996
ATTORNEY/AGENT INFORMATION:
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                                                                                                                                                                                                                                                      TOPOLOGY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                          APPLICATION NUMBER: CH 0 FILING DATE: 31-DEC-1996
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                                                                                                                            l Similarity
29; Conserv
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T: 3054 Cornwallis Road
Research Triangle Park
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Steiner, Sabine
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                                                                                                                                                                                                                                                       linear
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                                                                                                                                         63.4%;
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                                                                                                                                                                                                                                                                                                                                   281:
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Pred. No. 0.29;
                                                                                                                                         Score 26; DB 4;
Pred. No. 0.29;
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                                                                                                                           Mismatches
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US-07-879-647A-25/c
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US-08-998-416-952
                                                                                                                                                  sequence 25, Application US/07879647A Patent No. 5266689
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Best Local 9
                                                                                                                                GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      APPLICATION NUMBER: CH 0016/9
FILING DATE: 31-DEC-1996
ATTORNEY/AGENT INFORMATION:
NAME: Me195, J. TIMOTHY
REGISTRATION NUMBER: 38,241
REFERENCE/DOCKET NUMBER: PF/5
TELECOMMUNICATION INFORMATION:
TELEPHONE: 919-541-8887
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TELEFAX: 919-541-8689
INFORMATION FOR SEQ ID NO:
SEQUENCE CHARACTERISTICS:
                                                                                                                                                tent No.
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ORIGINAL SOURCE:
TITLE OF INVENTION:
                                APPLICANT:
                                                  APPLICANT:
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MEDIUM TYPE: Floppy
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TITLE OF INVENTION: GENOMIC DNA SEQUENCES OF ASHBYA GOSSYPII
TITLE OF INVENTION: AND USES THEREOF
NUMBER OF SEQUENCES: 1152
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              CLASSIFICATION: 435
PRIOR APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    LENGTH: 723 base pairs
TYPE: nucleic acid
STRANDEDNESS: single
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            APPLICATION NUMBER: US/OFFILING DATE: 24-DEC-1997
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OPERATING SYSTEM: PC-DOS/MS-DOS
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                                                                                                                                                                                                                                                                   8 AGGGCATTGGTTTTTTATCTAATAAATACACCCC 41
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                                                                                                                                                                                                                                                                                                                        29;
                                                                                                                                                                                                                                                                                                                   Similarity 85.3
29; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            27709
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      SSEE: No. 6239264artis Constantis Road
Research Triangle Park
No. 6239264th Carolina
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Application US/08998416
                                                            Elbrecht, A. Feighner, S.D.
                                                                                                             Chakraborty, P.R
                            Profous-Juchelka,
                                                                                              Dashkevicz,
                                                                                                                                                                                                                                                                                                                                                                                                         PAG1588UP
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Knechtle, Philipp
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Steiner, Sabine
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Philippsen, Peter
                                                                                                                                                                                                                                                                                                                                                                                                                                                         linear
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                                                                                                                                                                                                                                                                                                                                   63.4%;
       Eimeria Maxima DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              CH 0016/97
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             952:
                                                                                                                                                                                                                                                                                                                                 Score 26; DB 4
Pred. No. 0.29;
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                                                                                                                                                                                                                                                                                                                     Mismatches
                                                                                                                                                                                                                                                                                                                                                 DB 4; Length 723;
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RESULT 12
US-07-879-584A-25/c
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                                                                                                                                                                                                                                                                                                                                                          atent No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          INFORMATION FOR SEQ ID NO: SEQUENCE CHARACTERISTICS:
COMPUTER READABLE FORM:
MEDIUM TYPE: Diskette,3.50 inch,800 Kb
MEDIUM TYPE: storage
COMPUTER: Apple Macintosh
OPERATING SYSTEM: Macintosh 6.0.4
SOPTWARE: Microsoft Word 4.0
                                                                                                                                                                       NUMBER OF SEQUENCES: 50
CORRESPONDENCE ADDRESS:
ADDRESSEE: Merck & Co., Inc.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          COMPUTER READABLE FORM:
MEDIUM TYPE: Diskette, 3.50 inch, 800
MEDIUM TYPE: storage
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REFERENCE/DOCKET NUMBER: 1
TELECOMMUNICATION INFORMATION:
                                                                                                                                                                                                                    TITLE OF INVENTION:
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                                                                                                 COUNTRY: UZIP: 07065
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              APPLICATION NUMBER: 07/7
FILING DATE: 29-MAY-1991
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          APPLICATION NUMBER: FILING DATE: 19920
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   OPERATING SYSTEM: Macintosh 6.0.4 SOFTWARE: Microsoft Word 4.0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             LENGTH:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             CLASSIFICATION:
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                                                                                                                                                                                                                                                                                                                                                                                                                                         215 TCCACAAGGTGGGTTGGTTTTGTATCTAATAAACACAGCCC 175
                                                                                                                                                                                                                                                                                                                                         INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                     25, Application US/07879584A
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1 DCCCCGAAGGGCATTGGTTTTTTATCTAATAATACACCCC 41
                                                                                                                                            Rahway
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            NUCLEIC ACID
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Rahway
                                                                                                                              New
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                                                                                                                                                       126 Lincoln Avenue
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126 Lincoln Avenue
                                                                                                               USA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1744 bases
                                                                                                                                                                                                                            Profous-Juchelka, H.
VENTION: Eimeria Brunetti DNA
                                                                                                                                                                                                                                                                          Elbrecht, A. Feighner, S.D.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Conservative
                                                                                                                                                                                                                                                                                                          Dashkevicz, M.
                                                                                                                                                                                                                                                                                                                        Chakraborty, P.R
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      (908) 594-4720
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75.6%;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Score 25.8; DB Pred. No. 0.38;
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SEQUENCE CHARACTERISTICS:
                                               CLASSIFICATION: 435
PRIOR APPLICATION DATA:
APPLICATION UNMBER: 07/706
FILING DATE: 29-MAY-1991
ATTORNEY/AGENT INFORMATION:
NAME: Tribble, Jack L.
REGISTRATION NUMBER: 32,63
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         tent No.
                                                                                                                                                                        SOFTWARE: MacIntosh 6.0.4
SOFTWARE: Microsoft Word 4.0
CURRENT APPLICATION DATA:
APPLICATION NUMBER
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TELECOMMUNICATION INFORMATION: TELEPHONE: (908) 594-5321
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REGISTRATION NUMBER: 32,633
REFERENCE/DOCKET NUMBER: 1.1
TELECOMMUNICATION INFORMATION.
TELEPHONE: (908) 594-5321
                                                                                                                                                                                                                                                                                      COMPUTER READABLE FORM:
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REGISTRATION NUMBER: 32
REFERENCE/DOCKET NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         APPLICATION NUMBER: FILING DATE: 19920
                                                                                                                                                          APPLICATION NUMBER: US FILING DATE: 19920512
                                                                                                                                                                                                                    COMPUTER: Apple Macintosh
OPERATING SYSTEM: Macintos
                                                                                                                                                                                                                                                                                                       COUNTRY: UZIP: 07065
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STRANDEDNESS: sing
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                                                                                                                                                                                                                                                      MEDIUM TYPE: Diskette, 3.50 inch, 800 MEDIUM TYPE: storage
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       LENGTH:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    215 TCCACAAGGTGGGTTTGGTTTTGTATCTAATAAACACAGCCC 175
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          INFORMATION:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                               Profous-Juchelka,
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                                                                                                                                                                                                                                                                                                                                    Jersey
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19920512
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75.6%;
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                                                                                                              07/706,351
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US-07-879-644A-25/c
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                                                                                                                                                                                                                              TOPOLOGY:
US-07-879-644A-25
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Best Local S
Matches 31
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Patent No. 5230.
Chakra
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Best Local S
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SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CLASSIFICATION: 435
PRIOR APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               COMPUTER: Apple Macintosh O.4 OPERATING SYSTEM: Macintosh 6.0.4 SOFTWARE: Microsoft Word 4.0 CURRENT APPLICATION DATA:
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TELECOMMUNICATION INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 FILING DATE: 29-MAY-1991
ATTORNEY/AGENT INFORMATION:
NAME: Tribble, Jack L.
REGISTRATION NUMBER: 32,6
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   COMPUTER READABLE FORM:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                         TELEPHONE: (908)
TELEFAX: (908)
TELEX: 138825
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   MEDIUM TYPE: Diskette, 3.50 inch, 800 MEDIUM TYPE: storage
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                                                                                                                                                                                                                                                                                       TYPE: NUCLEIC ACID
STRANDEDNESS: single
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   APPLICATION NUMBER: UPPLICATION NUMBER: UPPLIC
                                                                                              Match 62.9%;
Local Similarity 75.6%;
les 31; Conservative
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Similarity
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Pred. No. 0.38
1; Mismatches
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215 TCCACAAGGTGGGTTGGTTTTGTATCTAATAAACACAGCCC 175

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RESULT 15
US-07-879-640A-25/c
; Sequence 25, Application US/07879640A
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Search completed: June 12, 2003, 04:38:55 Job time: 40.335 secs
                                                                                                                                                                                                                  US-07-879-640A-25
                                                                                                                                       Query Match 62.9%;
Best Local Similarity 75.6%;
Matches 31; Conservative
                                                                                                                                                                                                                                TELEFAX: (908) 594-4720
TELEX: 138825
INFORMATION FOR SEQ ID NO: 2
SEQUENCE CHARACTERISTICS:
LENGTH: 1744 bases
TYPB: NUCLEIC ACID
STRANDEDNESS: single
TOPOLOGY: linear
                                                                                                                                                                                                                                                                                                                                                  GOFTWARE: MICROSOft WORD 4.0

CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/07/879,640
FILING DATE: 19920512

CLASSIFICATION: 536
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 07/706,355
FILING DATE: 29-MAY-1991
ATTORNEY/AGENT INFORMATION:
NAME: TILDEL, Jack L.
REGISTRATION NUMBER: 32,633
REFERENCE/DOCKET NUMBER: .1842111
TELECOMMUNICATION INFORMATION:
TELEPHONE: (908) 594-5321
TELEPAX: (908) 594-5321
TELEPAX: 138825
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  COMPUTER READABLE FORM:
MEDIUM TYPE: Diskette,3.50 inch,800 Kb
MEDIUM TYPE: storage
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ADDRESSEE: Merck & Co.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                CITY: Rahway
STATE: New Jersey
COUNTRY: USA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            APPLICANT: Profous-Juchelka, H.
TITLE OF INVENTION: Elmeria Mitis DNA
TITLE OF INVENTION: Probes
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OPERATING SYSTEM: Macintosh 6.0.4
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                                                                 215 TCCACAAGGTGGGTTGGTTTTGTATCTAATAAACACACGCCC 175
                                                                                      126 Lincoln Avenue
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Dashkevicz, M.
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Result
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Maximum Match
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Maximum DB seq length: 2000000000
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Match
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Listing first 45 summaries
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    /cgn2_6/ptodata/2/pubpna/PCTUS_BUBCOMB.seq:*
/cgn2_6/ptodata/2/pubpna/US08_NEW_PUB.seq:*
/cgn2_6/ptodata/2/pubpna/US08_PUBCOMB.seq:*
/cgn2_6/ptodata/2/pubpna/US09_PUBCOMB.seq:*
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/cgn2_6/ptodata/2/pubpna/US60_NEW_PUB.seq:*
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/cgn2_6/ptodata/2/pubpna/US07_NEW_PUB.seq:*
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10 US-09-954-695-40
10 US-09-954-695-44
10 US-09-954-586-32
10 US-09-954-586-36
10 US-09-954-586-40
10 US-09-954-586-40
10 US-09-954-586-40
10 US-09-957-958-1219
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10 US-09-954-695-35
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Sequence 32, Appl
Sequence 40, Appl
Sequence 44, Appl
Sequence 35, Appl
Sequence 36, Appl
Sequence 40, Appl
Sequence 40, Appl
Sequence 40, Appl
Sequence 41, Appl
Sequence 11, Appl
Sequence 1219, Appl
Sequence 11, Appl
Sequence 31, Appl
Sequence 35, Appl
Sequence 37, Appl
Sequence 39, Appl
Sequence 31, Appl
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	48.8	48.8	48.8	48.8	48.8	48.8	48.8	48.8	48.8	48.8	48.8	48.8	48.8	48.8	48.8	48.8	49.3	49.3	49.3	49.3	49.3	49.8	49.8	49.8	49.8	49.8
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	US-10-239-676-122	US-09-897-778-160	US-09-850-716A-160	US-09-735-705-160	US-09-897-778-167	US-09-850-716A-167	US-09-735-705-167	US-10-270-595-3	us-09-919-172-86	US-09-974-298-70	US-09-887-576-82	US-09-938-842A-3456	US-09-771-935B-17	US-09-764-847-228	US-10-092-154-228	US-09-954-456-1750	US-09-939-980-34	US-09-918-995-6515	US-09-918-995-36295	US-10-083-357-605	US-10-083-357-17	US-10-329-960-1	US-10-003-806-10	US-08-779-460B-9	US-09-954-586-43	US-09-954-586-39
Codesing was the	122	160	160.	160		167,	Sequence 167, App	Sequence 3, Appli	Sequence 86, Appl	Sequence 70, Appl	Sequence 82, Appl	456	Sequence 17, Appl	228	Sequence 228, App	Sequence 1750, Ap	Sequence 34, Appl		Sequence 36295, A	605	Sequence 17, Appl	Sequence 1, Appli	Sequence 10, Appl	2	43,	Sequence 39, Appl

ALIGNMENTS

US-09-954-695-32/c

J. Sequence 32, Application US/09954695

Patent No. US20020055116A1

J. GENERAL INFORMATION:

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RESULT 2
US-09-954-695-36/c
US-09-954-695-36/c
; Sequence 36, Application US/09954695
; Patent NO. US200Z0055116A1
; GENERAL INFORMATION:
; APPLICANT: CUNNINGHAM, Melissa M.
; APPLICANT: WEISBURG, William G.
                                                                                                                                                                                                                                                                                                                                                                PRIOR APPLICATION NUMBER: US 60/232,028
PRIOR FILING DATE: 2000-09-12
NUMBER OF SEQ ID NOS: 69
SOFTWARE: PATENTIN VERSION 3.1
SEQ ID NO 32
LENGTH: 29
TYPE: DNA
ORGANISM: Artificial Sequence
FEATURE:
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Best Local S
Matches 24
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          APPLICANT: STULL, Paul D.
APPLICANT: WEISBURG, WIlliam G.
TITLE OF INVENTION: COMPOSITIONS, METHODS AND KITS FOR DETERMINING
TITLE OF INVENTION: CRYPTOSPORIDIUM ORGANISMS IN A TEST SAMPLE
FILE REFERENCE: GP116-02.UT
CURRENT APPLICATION NUMBER: US/09/954,695
CURRENT FILING DATE: 2001-09-11
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     APPLICANT: CUNNINGHAM, Melissa M. APPLICANT: STULL, Paul D. APPLICANT: WEISBURG, William G.
                                                                                                                                                                                  Similarity
STULL, Paul D. WEISBURG, William G.
                                                                                                                                                                                                                                                          Conservative
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Pred. No. 14;
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US-09-954-695-44
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US-09-954-695-40
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; OTHER INFORMATION: Synthetic Construct
US-09-954-695-36
                                                              GENERAL INFORMATION:
APPLICANT: CUNNINGHAM, Melissa M.
APPLICANT: STULL, Paul D.
APPLICANT: WEISBURG, William G.
APPLICANT: WEISBURG, WILLIAM G.
APPLICANT: COMPOSITIONS, METHODS AND KITS FOR DETERMINING THE PRESENCE OF TITLE OF INVENTION: COMPOSITIONS OR ANTICLE OF INVENTION: COMPOSITIONS IN A TEST SAMPLE FILE REFERENCE: GP116-02.UT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   SOFTWARE: PatentIn version 3.1
SEQ ID NO 40
LENGTH: 29
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SEQ ID NO 36
LENGTH: 29
                                                                                                                                                                                                                                                                                                                                Sequence 44, Application US/09954695
Patent No. US20020055116A1
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Patent No. US20020055116A1
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APPLICANT: WEISBURG, William G.
APPLICANT: WEISBURG, WILLIAM G.
TITLE OF INVENTION: COMPOSITIONS, METHODS AND KITS FOR DETERMINING
TITLE OF INVENTION: CRYPTOSPORIDIUM ORGANISMS IN A TEST SAMPLE
FILE REFERENCE: GP116-02.UT
CURRENT APPLICATION NUMBER: US/09/954,695
CURRENT FILING DATE: 2001-09-11
PRIOR APPLICATION NUMBER: US 60/232,028
PRIOR FILING DATE: 2000-09-12
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CURRENT APPLICATION NUMBER: US/09/954,695
CURRENT FILING DATE: 2001-09-11
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ORGANISM: Artificial Sequence
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SOFTWARE: PatentIn version 3.1
SEQ ID NO 32
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SOFTWARE: PatentIn version 3.1
SEQ ID NO 44
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Best Local 9
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                                                                                             APPLICANT: STULL, Paul D.
APPLICANT: WEISBURG, WIlliam G.
APPLICANT: WEISBURG, WILLIAM G.
TITLE OF INVENTION: COMPOSITIONS, METHODS AND KITS FOR DETERMINING THE PRESENCE OF
TITLE OF INVENTION: CRYPTOSPORIDIUM PARVUM ORGANISMS IN A TEST SAMPLE
FILE REFERENCE: GP116-03.UT
CURRENT APPLICATION NUMBER: US/09/954,586
CURRENT FILING DATE: 2001-09-11
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NUMBER OF SEQ ID NOS: 69
SOFTWARE: PatentIn version 3.1
SEQ ID NO 36
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APPLICANT: WEISUURG, WILLIAM G.
TITLE OF INVENTION: COMPOSITIONS, METHODS AND KITS FOR DETERMINING THE
TITLE OF INVENTION: CRYPTOSPORIDIUM PARVUM ORGANISMS IN A TEST SAMPLE
FILE REFERENCE: GP116-03.UT
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CURRENT FILING DATE: 2001-09-11
PRIOR APPLICATION NUMBER: US 60/232,028
PRIOR FILING DATE: 2000-09-12
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                                                            PRIOR APPLICATION NUMBER: US 60/232,028 PRIOR FILING DATE: 2000-09-12
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TYPE: DNA
ORGANISM: Artificial Sequence
FEATURE:
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TYPE: RNA
ORGANISM: Artificial Sequence
FEATURE:
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o. US20020146717A1
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CURRENT APPLICATION NUMBER: US/09/954,586
CURRENT FILING DATE: 2001-09-11
PRIOR APPLICATION NUMBER: US 60/232,028
PRIOR FILING DATE: 2000-09-12
NUMBER OF SEQ ID NOS: 69
SOFTWARE: Patentin version 3.1
SEQ ID NO 44
LENGTH: 29
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GENERAL INFORMATION:
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PRIOR FILING DATE: 2000-09-12
NUMBER OF SEQ ID NOS: 69
SOFTWARE: Patentin version 3.1
SEQ ID NO 40
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APPLICANT: STULL, Paul D.
APPLICANT: WEISBURG, William G.
TITLE OF INVENTION: COMPOSITIONS, METHODS AND KITS FOR DETERMINING THE
TITLE OF INVENTION: CRYPTOSPORIDIUM PARVUM ORGANISMS IN A TEST SAMPLE
FILE REFERENCE: GP116-03.UT
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Patent No. US20020146717A1
                       OTHER INFORMATION: Synthetic Construct
                                                       ORGANISM: Artificial Sequence
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CURRENT FILING DATE: 2001-09-11
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APPLICANT: STULL, Paul D.
APPLICANT: WEISBURG, William G.
TITLE OF INVENTION: COMPOSITIONS, METHODS AND KITS FOR DETERMINING THE PRESENCE OF
TITLE OF INVENTION: CRYPTOSPORIDIUM PARYUM ORGANISMS IN A TEST SAMPLE
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ORGANISM: Artificial Sequence
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Pred. No. 14;
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                                                                     Matches
                                                                                   Query Match
Best Local
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US-09-732-665-4
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                                                                                                                                                                                                                                                                                                                                                                                                                                                       GENERAL INFORMATION:
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                                                                                                                                                                                                                                                                                                                                                                                                            APPLICANT:
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                                                                                Local Similarity
182 GCCCGAACTGCGCTGGTCTTTCATCAGAAAAGTATACTCC 222
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CURRENT APPLICATION NUMBER: US/09/732,665
CURRENT FILING DATE: 2000-12-08
NUMBER OF SEQ ID NOS: 12
SOFTWARE: Patentin version 3.0
SEQ ID NO 4
LENGTH: 2499
TYPE: DNA
ORGANISM: VIRUS
US-09-732-665-4
                                                                                                          ; NAME/KEY: CDS
; LOCATION: (109)...(837)
US-10-167-015-26
                                                                                                                                                              NUMBER OF SEQ ID NOS: 34

SOFTMARE: FRATSEQ for Windows Version 3.0

SEQ ID NO 26

LENGTH: 1130

TYPE: DNA
ORGANISM: 9lycine max
FRATHER.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Query Match
Best Local Similarity 80.6
Matches 25; Conservative
                                                                                                                                                                                                                                                                                             CURRENT APPLICATION NUMBER: US/10/167,015
CURRENT FILING DATE: 2002-06-11
                                                                                                                                                                                                                                                               PRIOR APPLICATION NUMBER: US 60/297,478
PRIOR FILING DATE: 2001-06-12
                                                                                                                                                                                                                                                                                                                                APPLICANT: Tao, Yumin
TITLE OF INVENTION: Anti-Apoptosis Genes and Methods of
TITLE OF INVENTION: Thereof
FILE REFERENCE: 1388
                                                                                                                                                                                                                                                                                                                                                                                                                                     APPLICANT: Simmons, Carl R
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Sequence 4, Application US/09732665
Patent No. US20010034018A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             APPLICANT: Roche D. TITLE OF INVENTION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1669 AGGGCAAAGGTTTTTTAACTAAAAACAACAC 1699
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            8 AGGGCATTGGTTTTTTATCTAATAAATACAC 38
DCCCCGAAGGGCATTGGTTTTTTATCTAATAAATACACCCC 41
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               13 ATTGGTTTTTTATCTAATAAATACA 37
                                                                                                                                                                                                                                                                                                                                                                                                                   Gordon-Kamm, William J.
                                                                                                                                                                                                                                                                                                                                                                                       Acevedo, Pedro A. Navarro
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Application US/10167015
No. US20030056249A1
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VENTION: Hepatitis Sentinel Virus I
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                                              Conservative
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                                                          51.2%;
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                                    Score 21; DB 9; Le
Pred. No. 2.4e+02;
1; Mismatches 12;
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Pred. No. 2.1e+02;
0; Mismatches 6;
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                                                                  Length 1130;
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                                      Indels
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                                 Gaps
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Sequence 1, Application US/09957995A Patent No. US20020165373A1 GENERAL INFORMATION:

APPLICANT: Conrad, Patricia A.
Barr, Bradd C.

TITLE OF INVENTION: Recombinant Neospora Antigens and Their

Karen W.

NUMBER OF SEQUENCES: 24 CORRESPONDENCE ADDRESS:

ADDRESSEE: Townsend and Townsend and Crew LLP STREET: Two Embarcadero Center, Eighth Floor

CITY: San Francisco STATE: California COUNTRY: USA ZIP: 94111-3834

COMPUTER READABLE FORM: MEDIUM TYPE: Floppy disk

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LOCATION: 1..1747

OTHER INFORMATION: /note= "DNA encoding nuclear small subunit (nss)-rRNA gene"

SEQUENCE DESCRIPTION: SEQ ID NO: 1:
US-09-957-995A-1
                                                                                         밁
                 RESULT 12
US-09-294-093B-1219
                                                                                                                                                              Best Loc
Matches
                                                                                                                                                                                                                                                                                                                                                                                                   TELEPHONE: (415) 576-0200
TELEPAX: (415) 576-0300
INFORMATION FOR SEO ID NO: 1:
SEQUENCE CHARACTERISTICS:
LENGTH: 1747 base pairs
TYPE: nucleic acid
STRANDENESS: single
                                                                                                                                                                                                 Query Match
Sequence 1219,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 PRIOR APPLICATION DATA:

APPLICATION UNMBER: US 08/215,858
FILING DATE: 21-MAR-1994
APPLICATION NUMBER: US 08/327,516
FILING DATE: 20-CCT-1994
APPLICATION NUMBER: US 08/645,951
FILING DATE: 10-MAY-1996
FILING DATE: 10-MAY-1996
FILING DATE: 30-MAR-1999
FILING DATE: 30-MAR-1999
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0,
CURRENT APPLICATION DATA:
                                                                                                                                                                                  Local
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             NAME: Bastian, Kevin L.
REGISTRATION NUMBER: 34,774
REFERENCE/DOCKET NUMBER: 023070-082512US
TELECOMMUNICATION INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                MOLECULE TYPE: DNA (genomic)
                                                                                       1 DCCCCGAAGGGCATTGGTTTTTTATCTAATAAATACACCCC 41
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  APPLICATION NUMBER: US/09/957,995A FILING DATE: 15-APT-2002 CLASSIFICATION: <Unknown>
                                                                                                                                                                                    Similarity
                                                                                                                                                                                                                                                                                                                                                                                      ropoLogy: linear
                                                                                                                                                                    Conservative
 Application US/09294093B
                                                                                                                                                                                      51.2%;
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                                                                                                                                                                                        Score 21; DB 9;
Pred. No. 2.7e+02;
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                                                                                                                                                                                                         Length 1747;
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; NAME/KEY: misc_feature
; OTHER INFORMATION: Incyte ID No. US20010051335A1 700343964H1
US-09-294-093B-1219
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US-09-870-759-83
US-09-870-759-83
US-09-870-759-83
Patent No. US20020177551A1
GENERAL INFORMATION:
APPLICANT TERMAN, DAVID S
APPLICANT TERMAN, DAVID S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        밁
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SEQ ID NO 1219
LENGTH: 300
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GENERAL INFORMATION:

Lalgudi, Raghunath, V.

APPLICANT: Ito, Laura, V.

APPLICANT: Sherman, Bradley, K.

APPLICANT: Sherman, Bradley, K.

APPLICATI: POLYNCLEOTIDES AND POLYPEPTIDES DERIVED FROM CORN.TASSEL

FILE REFERENCE: PL-0009 US

CURRENT APPLICATION NUMBER: US/09/294,093B

CURRENT FILING DATE: 1999-04-16

CURRENT FILING DATE: 1999-04-16

CURRENT FILING DATE: 1999-04-16
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                                                                                                                         US-09-954-695-31/c
                                                                                                                                           RESULT 14
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Best Local S
Matches 26
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                           SEQ ID NO 83
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   NUMBER OF SEQ ID NOS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CURRENT APPLICATION NUMBER: US/09/870,759
CURRENT FILING DATE: 2002-01-14
PRIOR APPLICATION NUMBER: US 60/208,128
PRIOR FILING DATE: 2000-05-30
                                                                    GENERAL INFORMATION:
                                                                                   Sequence 31, Application US/09954695 Patent No. US20020055116A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           FILE REFERENCE: 870759
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TITLE OF INVENTION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ORGANISM: Zea mays
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        SOFTWARE: PatentIn
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           NUMBER OF SEQ ID NOS: 166
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                          LENGTH: 17
TYPE: DNA
APPLICANT: STULL, Paul D.
APPLICANT: WEISBURG, WILLIAM G.
TITLE OF INVENTION: COMPOSITIONS, METHODS AND KITS FOR DETERMINING THE PRESENCE OF
                                                  APPLICANT: CUNNINGHAM, Melissa M.
                                                                                                                                                                                                                                                                                                                                                                                                                     ORGANISM: Streptococcus agalactiae
                                                                                                                                                                                                                                                                                                                                                                   NAME/KEY: CDS
LOCATION: (70
                                                                                                                                                                                                                                                                                                                                                                                                        FEATURE:
                                                                                                                                                                                                                                                                                                                                                    OTHER INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Local Similarity
                                                                                                                                                                                          15996 CCGAACGGCGCTATTTTATTTCTAATAAAGAAAC 16030
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                                                                                                                                                                                                                                                                l Similarity
26; Conserva
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milarity 74.3%;
Conservative
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April 21, 1900
OS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              version 3.1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   COMPOSITIONS AND METHODS FOR TREATMENT OF NEOPLASTIC DISEASE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          50.2%;
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Pred. No. 2
                                                                                                                                                                                                                                                                      0; Mismatches
                                                                                                                                                                                                                                                                                     Score 20.6; DB 9;
Pred. No. 6.3e+02;
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Sequence 35, Application US/0954695
Fatent No. US2020055116A1
Fatent No. US2020055116A1
GENERAL INFORMATION:
APPLICANT: CUNNINGHAM, Melissa M.
APPLICANT: STULL, Paul D.
TITLE OF INVENTION: COMPOSITIONS, METHODS AND KITS FOR DETERMINING THE PRESENCE OF TITLE OF INVENTION: COMPOSITIONS, METHODS AND KITS FOR DETERMINING THE PRESENCE OF TITLE OF INVENTION: CRYPTOSPORIDIUM ORGANISMS IN A TEST SAMPLE
CURRENT APPLICATION NUMBER: US/09/954,695
CURRENT FILING DATE: 2001-09-11
PRIOR APPLICATION NUMBER: US 60/232,028
FRIOR APPLICATION NUMBER: US 60/232,028
NUMBER OF SEQ ID NOS: 69
SOFTWARE: Patentin version 3.1
LENGTH: 23
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         CRYPTOSPORIDIUM ORGANISMS IN A TEST SAMPLE
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49.8%; Score 20.4; DB 10; Length 23;
Best Local Similarity 95.5%; Pred. No. 1.6e+02;
Matches 21; Conservative 0; Mismatches 1; Indels
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49.8%; Score 20.4; DB 10;
Best Local Similarity 95.5%; Pred. No. 1.6e+02;
Matches 21; Conservative 0; Mismatches 1;
TITLE OF INVENTION: CRYPTOSPORIDIUM ORGANIS:
FILE REFERENCE: GP116-02.UT
CURRENT APPLICATION NUMBER: US/09/954,695
CURRENT FILING DATE: 2001-09-11
PRIOR APPLICATION NUMBER: US 60/232,028
PRIOR PILING DATE: 2000-09-12
NUMBER OF SEQ ID NOS: 69
SOFTWARE: PatentIn version 3.1
LENGHH: 23
                                                                                                                                                                                                              TYPE: DNA
CRGANISM: Artificial Sequence
FEATURE:
CTHER IMPORMATION: Synthetic Construct
US-09-954-695-31
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ; OTHER INFORMATION: Synthetic Construct US-09-954-695-35
                                                                                                                                                                                                                                                                                                                                                                                                                                16 GGTTTTTTATCTAATAATACA 37
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TYPE: RNA
ORGANISM: Artificial Sequence
FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         RESULT 15
US-09-954-695-35/c
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Search completed: June 12, 2003, 04:58:28 Job time : 243.834 secs

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Title: Perfect score: Sequence:

Run on:

Scoring table:

Searched:

Database

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User.

Coccidioides immitis.

Coccidioides immitis.

Coccidioides immitis.

Coccidioides immitis.

Coccidioides immitis

Eukaryota; Fungi; Ascomycota; Pezizomycotina; Eurotiomycetes;

Onygenales; mitosporic Onygenales; Coccidioides.

I (bases 1 to 351)

RS Gardner, M.J. and Kirkland, T.

Generation of Esrs from Coccidioides immitis spherule cDNA library

Contact: Malcolm J. Gardner

Department of Eukaryotic Genomics

The Institute for Genomic Research

9712 Medical Center Drive, Rockville, MD 20850, USA

Fax: 301 838 3319

Fax: 301 838 0208

Email: gardner@tigr.org.

Location/Qualifiers
                                                 BF252878 EST420141
BF251284 EST41854
BF252095 EST419357
BF25135 EST418646
BF251385 EST418646
BF251001 EST418258
BF251006 EST418219
AA783903 C8h04a1.f
AA783903 C8h04a1.f
AA783303 C8h04a1.f
AA783303 C8h04a1.f
AA7833154 C1602a1.f
AA7833154 C1602a1.f
AA783352 C8h04a1.r
AA783304 C1602a1.r
AA783304 C8h04a1.r
AA783304 C8h04a1.r
AA783304 C8h04a1.r
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immitis cDNA clone CIAAK21 5' sequence, mRNA sequence.
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AA367845 j0dllal.r
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BF251811 EST419073
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BF251704 EST418888
BF252581 EST419843
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Coccidioides immitis
Coccidioides immitis
Euraryota; Fungl. Ascomycota; Pezizomycotina; Eurotiomycetes;
Congenales; Mutosporic Onygenales; Coccidioides.

1 (bases 1 to 362)
Gardner, M.J. and Kirkland, T.
Generation of ESTs from Coccidioides immitis spherule cDNA library
Unpublished (2000)
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Eukaryota; Pungi: Ascomycota; Pezizomycotina; Eurotiomycetes; Onygenales; mitosporic Onygenales; Coccidioides.
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98.0%; Score 40.2; DB 12; Length 362;
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Matches 40; Conservative 1; Mismatches 0; Indels 0
                                                                                                                    Length 351;
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Contact: Malcolm J. Gardner
Department of Eukaryotic Genomics
The Institute for Genomic Research
712 Medical Center Drive, Rockville, MD 20850, USA
Tel: 301 838 3519
Fax: 301 838 0208
Email: gardner@tigr.org.
Email: gardner@tigr.org.
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Eukaryota; Fungi; Ascomycota; Pezizomycotina; Eurotiomycetes;

Onygenales; mitosporic Onygenales; Coccidioides.

I (bases 1 to 391)

Garden, M.J. and Kirkland, T.

Generation of ESTS from Coccidioides immitis spherule cDNA library

Contact: Malcolm J. Gardner

Contact: Malcolm J. Gardner

Department of Eukaryotic Genomics

The Institute for Genomic Research

FAIS Medical Center Drive, Rockville, MD 20850, USA

Tel: 301 838 3519

Fax: 301 838 0208
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1 (bases 1 to 377)
Gardner, M.J. and Kirkland, T.
Generation of ESTs from Coccidioides immitis spherule cDNA library
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The Institute for Genomic Research
9712 Medical Center Drive, Rockville, MD 20850, 1
9713 301 838 3519
Par: 301 838 0208
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ilarity 97.6%; Pred. No. 0.0031;
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Location/Qualifiers
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Location/Qualifiers
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                                                                                 Unpublished (2000)
Contact: Malcolm J. Gardner
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EST418899 Coccidioides immitts spherule cDNA library Coccidioides immitts cDNA clone CIAAK45 5' sequence, mRNA sequence.

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Onygenales; mitosporic Onygenales; Coccidioides.

1 (bases 1 to 518)
Cardner, M.J. and Kirkland, T.
Generation of ESTS from Coccidioides immitis spherule cDNA library Unpublished (2000)
Contact: Malcolu J. Gardner
Department of Enkaryotic Genomics
The Institute for Genomic Research
The Institute for Genomic Research
The Institute for Genomic Research
Tel: 301 838 3519
Tex: 301 838 0208
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Location/Qualifiers
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Corcidioides.
Corcidioides immitis spherule cDNA library
Contact: Nalcolm 7. Gardner
Department of Eukaryotic Ganomics
The Institute for Genomic Research
9712 Medical Center Drive, Rockville, MD 20850, USA
Tel: 301 838 3519
Fax: 301 838 0208
                                                                                                                                      488 bp mRNA linear EST 15-NOV-2001 STA18888 Coccidioides immitis spherule cDNA library Coccidioides immitis cDNA clone CIAAK33 5' sequence, mRNA sequence.
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Pred. No. 0.003;
1; Mismatches 0; Indels 0
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Eukaryota; Fungl: Ascomycota; Pezizomycotina; Eurotiomycetes;

Eukaryota; Fungl: Ascomycota; Pezizomycotina; Eurotiomycetes;

Onygenales; mitosporic Onygenales; Cocidioides.

I (bases it or 567)

Gardner, M.J. and Kirkland, T.

Generation of ESTS from Cocidioides immitis spherule cDNA library

L Onpublished (2000)

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Email: gardner@tigr.org.
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1 (bases i to 568)

2 cardner, M.J. and Kirkland, T.
Generation of ESTs from Coccidioides immitis spherule cDNA library Unpublished (2000)
                                                                                                                                                                                                                                                               BF352094 557 bp mRNA linear EST 15-NOV-2001 EST419356 Coccidioides immitis spherule cDNA library Coccidioides immitis cDNA clone CIAAQB0 5' sequence, mRNA sequence.
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Coccidioides immitis

Eukaryota: Fungi: Ascomycota; Pezizomycotina; Eurotiomycetes;

Onygenales: mitosporic Onygenales; Coccidioides.

I (bases 1 to 546)

S Garden: M.J. and Kirkland, T.

Generation of ESTs from Coccidioides immitis spherule cDNA library

Unpublished (2000)

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                                          Coccidioldes immitis.

Coccidioldes immitis

Coccidioldes immitis

Eukaryota; Fungi, Ascomycota; Pezizomycotina; Eurotiomycetes;
Onygenales; mitosporic Onygenales; Coccidioldes.

E 1 (bases 1 to 541)

S Gardener, M.J. and Kirkland, T.

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Unpublished (2000)

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Email: gardner@tigr.org.
Location/Qualifiers
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EST445666 Coccidioides immitis spherule cDNA library Coccidioides
immitis cDNA clone CIGAB68 5' sequence, mRNA sequence.
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Email: 9ardner@tigr.org.

10.546

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/note="Vector: pBluescript SK(-); Site_1: EcoRl; Site_2:

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Pred. No. 0.0029;
1; Mismatches 0; Indels .0
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Best Local Similarity 97.6%;
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SM Coccidioldes immittis.

Eukaryota; Fungi; Ascomycota; Pezizomycotina; Burotiomycetes; Onygenales; mitosporic Onygenales; Coccidioldes.

E (bases 1 to 572)

Gardner, M. J. and Kirkland, T. Gencartion of ESTS from Coccidioldes immitis spherule cDNA library

L Unpublished (2000)

L Unpublished (2000)

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Coccidioides immitis

Coccidioides: mitosporic Onygenales; Coccidioides.

I (bases 1 to 605)

S Gardner, M.J. and Kirkland, T.

Generation of ESTS from Coccidioides immitis spherule cDNA library

L (published (2000)

L Gardner: Nalcolm J. Gardner

Context: Nalcolm J. Gardner

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                                                                  BF252095 572 bp mRNA linear EST 15-NOV-2001 EST419357 Coccidioides immitis spherule cDNA library Coccidioides immitis cDNA clone CIAAQ81 5' sequence, mRNA sequence.
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Location/Qualifiers

1. .572

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/db_xref="taxon:5501"
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Location/Qualifiers
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Coccidioides immitis.

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Coccidioides immitis

Eukaryota; Fungi, Ascomycota; Pezizomycotina; Eurotiomycetes;

Onygenales; mitosporic Onygenales; Coccidioides.

El (Dasses I to 570)

Gardner, M.J. and Kirkland, T.

Generation of ESTS from Coccidioides immitis spherule cDNA library

Longarish and Cl000)

Contact: Malcolm J. Gardner

Department of Eukaryotic Genomics

The Institute for Genomic Research

9712 Medical Center Drive, Rockville, MD 20850, USA

Tel: 301 838 3319

Fax: 301 838 0208

Email: gardnerétigr.org.

Location/Oualifiers

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1; Mismatches 0; Indels 0
Contact: Malcolm J. Gardner
Department of Eukaryotic Genomics
The Institute for Genomic Research
9712 Medical Center Drive, Rockville, MD 20850, USA
Tel: 301 838 3519
Fax: 301 838 0208
Email: gardner@tigr.org.
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/db_xref="taxon:5501"
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Coccidioides immitis.

Coccidioides immitis

Enkaryotas; Fuggi; Ascomycota; Pezizomycotina; Eurotiomycetes;

Enkaryotas; Fuggi; Ascomycota; Pezizomycotina; Eurotiomycetes;

Onygenales; mitosporic Onygenales; Coccidioides.

E 1 (bases 1 to 679)

SG Gardner, M.J. and Kirkland, T.

Generation of ESTs from Coccidioides immitis spherule cDNA library

AL Unpublished (2000)

Contact: Malcolm J. Gardner

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Location/Qualifiers
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/lab_host="SoLR"
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98.0%; Score 40.2; DB 12; Length 679; 97.6%; Pred. No. 0.0029; tive 1; Mismatches 0; Indels 0

Query Match Best Local Similarity 97.69 Matches 40; Conservative

Search completed: June 12, 2003, 04:35:05 Job time: 1507.64 secs

Marie Telephone Constitution

GenCore version 5.1.6 Copyright (c) 1993 - 2003 Compugen Ltd.

OM nucleic - nucleic search, using sw model

June 11, 2003, 22:21:06; Search time 348.269 Seconds (without alignments) 1921.975 Million cell updates/sec Run on:

US-09-674-195C-17 · 23

1 degaagtegaggettteageatg 23 Perfect score: Sequence:

IDENTITY_NUC Gapop 10.0 , Gapext 1.0 Scoring table:

2054640 seqs, 14551402878 residues Searched:

4109280 Total number of hits satisfying chosen parameters:

Minimum DB seq length: 0 Maximum DB seq length: 200000000

Post-processing: Minimum Match 0% Maximum Match 100% Listing first 45 summaries

Gen Embl: * Database :

gb_ba:*
gb_htg:*
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Pred. No. is the number of results predicted by chance to have a

em_htgo_other:*

score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

	5306	5307 H.capsul	3572 H.capsul	_	AB030916 Aspergill				AF203458 Cyclaneus	AB030917 Aspergill	mylocar	U72712 Siphula cer	X78538 A.niger (is	Y13996 Paecilomyce		_	_		AF085473 Dibaeis b	_	_			**	*4 .		ABU334/9 Levelliul			AF053729 Helicascu	3947	946 Penicili	80		-	Anaptych	6	_	2	5947	2948	949	2997	AF062664 Endophyte
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ALIGNMENTS

יייי אנאניביטארארא 1704 pp DNA H.capsulatum ssp. duboisii 188 rRNA gene. 275306RESULT 1
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SOURCE A
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PLN 10-DEC-1999

linear

275306.1 GI:1419549
18S ribosomal RNA, 18S rRNA gene; small subunit ribosomal RNA.
Ajellomyces capsulatus.
Ajellomyces capsulatus.
Ajellomyces capsulatus.
Onygenales; Onygenaceae; Ajellomyces.

1 (bases 1 to 1704)
Okeke, C.N., Kappe, R., Zakikhani, S., Nolte, O. and Sonntag, H.G.
Ribosomal genes of Histoplasma capsulatum var. duboisil and var.
farciminosum

REFERENCE AUTHORS TITLE

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AF320009 1726 bp DNA linear PLN 13-FEB-2001
Ajellomyces capsulatus ATCC26032 18S ribosomal RNA gene, partial
sequence.
                                                                                                                                                PLN 30-JUN-1993
                                                                                                                                                                                                                                                                                                                                  Direct Submission
Submitted (19-WAR-1991) B.H. Bowman, Roche Molecular Systems, 1145
Submitted (19-WAR-1991) B.H. Bowman, Roche Molecular Systems, 1145
2 (bases 1 to 1713)
Bowman, B.H., Taylor, J.W. and White, T.J.
Molecular evolution of the fungi: human pathogens
Mol. Biol. Evol. 9 (5), 893-904 (1992)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            3 (bases 1 to 1713)
Berbee,M.L. and Taylor,J.W.
Convergence in ascospore discharge mechanism among pyrenomycete
fungi based on 18S ribosomal RNA gene sequence
Mol. Phylogenet. Evol. 1 (1), 59-71 (1992)
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Ajellomyces capsulatus
Eukaryota; Fungi; Ascomycota; Pezizomycotina; Eurotiomycetes;
Onygenales; Onygenaceae; Ajellomyces.
1 (bases 1 to 1726)
Kasuga,T., White,T.J. and Taylor,J.W.
The Molecular Clock in Fungi in the Class Plectomycetes
Unpublished
                                                                                                                                                                                         X58572.1 GI:2759
18S ribosomal RNA.
Ajellomyces capsulatus.
Ajellomyces capsulatus.
Ajellomyces capsulatus
Bukaryota; Fungi; Ascomycota; Pezizomycotina; Eurotiomycetes; Onygenales; Onygenaceae; Ajellomyces.
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H.Capsulatum ssp. farciminosum 18S rRNA gene.
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275307.1 GI:1419550
18S ribosomal RNA; 18S rRNA gene; small subunit ribosomal RNA.
Ajellomyces capsulatus.
Ajellomyces capsulatus
Congenales; Congenaceae; Ajellomyces.
1 (bases 1 to 1704)
1 (bases 1 to 1704)
Cokeb.C.N. Kappe, R., Zakikhani,S., Nolte,O. and Sonntag,H.G.
Ribosomal genes of Histoplasma capsulatum var. duboisil and var.
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Microbiology, University of Heidelberg, Hygiene Institute, Im
Neuenheimer Feld 324, Heidelberg, D-69120, Germany
Location/Qualifiers
1. 1704
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                                                                                                         Submitted (06-JUL-1996) Reinhard Kappe, Hygiene & Med.
Microbiology, University of Heidelberg, Hygiene Institute, Im
Neuenheimer Feld 324, Heidelberg, D-69120, Germany
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/gene="185 rRNA"
/product="185 rlbosomal RNA"
/prod 437 t
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1 364 c 471 g 437 t
Mycoses 41 (9-10), 355-362 (1998)
99114487
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/db_xref="taxon:5037"
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/gene="18S rRNA"
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1 (bases 1 to 969)
Platt, J.L. and Spatafora, J.W.
Evolutionary relationships of nonsexual lichenized fungi: molecular phylogenetic hypotheses for the genera Siphula and Thamnolia from SSU and LSU rDNA analyses
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    786
/organism="Teloschistes cf. chrysophthalmus Feige and Mies
ESS-6640"

                                                                                                                                                                                                                                                                                                                                                 Submitted (31-AUG-1998) Department of Botany, NHB-166, Smithsonian Institution, National Museum of Natural History, 10th & Constitution Avenue NW, Rashington, DC 20560-0166, USA Location/Qualifiers
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Platt,J.L. and Spatafora,J.W.
Direct Submission
Submitted (16-DEC-1998) Department of Botany & Plant Pathology,
Oregon State University, 2082 Cordley Hall, Corvallis, OR
97331-2902, USA
                                                                                                                 Eukaryota; Fungi; Ascomycota; Pezizomycotina; Lecanoromycetes; Lecanorales; Teloschistineae; Teloschistaceae; Teloschistes.

(bases 1 to 786)
Stenroos, S. K. and Depriest; P. T.
SSU rDNA phylogeny of cladoniiform lichens
Am. J. Bot. 85, 1548-1559 (1998)
2 (bases 1 to 786)
Depriest, P. T., Ivanova, N. and Gargas, A.
Direct Submission
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Eukaryota; Fungi; Ascomycota; Pezizomycotina; Lecanoromycetes;
Lecanoromycetes incertae sedis; Icmadophilaceae; Dibaeis.
                                                                       Teloschistes of. chrysophthalmus Feige and Mies ESS-6640. Teloschistes of. chrysophthalmus Feige and Mies ESS-6640
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/db_xref="taxon:88650"
/country="Cape Verde:Santo Antao, 1988"
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/note="small subunit ribosomal RNA"
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Pred. No. 11;
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/db_xref="taxon:83478"
<1. .>969
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Best Local Similarity 95.5%;
Matches 21; Conservative 0
AF088252.1 GI:4731142
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     2 (bases 1 to 1726)
Kasuga,T., White,T.J. and Taylor,J.W.
Direct Submission
Submitted (07-NOV-2000) Roche Molecular Systems, 1145 Atlantic
Ave., Alameda, CA 94501, USA
Location/Qualifiers
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/organism="Ajellomyces capsulatus"
/strain="ATCC26032; G217B"
/db_xref="ATCC:26032"
/db_xref="taxon:5037"
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/strain="IEF1"
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100 c 121 g 131 t
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371 c 475 g 440 t
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1 Similarity 95.5%;
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97331-2902, USA
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Matches 21; Conservative
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Best Local Similarity 95.5%;
Matches 21; Conservative (
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Dibaeis baeomyces small subunit ribosomal RNA gene, partial
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Cyclaneusma minus small subunit ribosomal RNA gene, partial
                                                                                                                                                                                                                                                                                        Eukaryota; Fundi: Ascomycota; Pezizomycotina; Lecanoromycetes; Lecanoromycetes incertae sedis; Icmadophilaceae; Dibaeis. (bases 1 to 990)
Platt.J.L., Camacho, F.J. and Spatafora, J.W.
Exolution of the lichen symbiosis within the Leotiales; molecular phylogenetic hypotheses for Dibaeis and Baeomyces
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Submitted (12-NOV-1999) Department of Botany and Plant Pathology, Oregon State University, 2082 Cordley Hall, Corvallis, OR
                                                                                                                                                                                                                                                                                                                                                                                                     2 (bases 1 to 990).
Platt,J.L. and Spatafora,J.W.
Direct, Submission
Submitted (18-NOV-1998) Botany & Plant Pathology, Oregon State University, 2082 Condley Hall, Corvallis, OR 97331, USA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Eukaryote; Fungi; Ascomycota; Pezizomycotina; Leotiomycetes; Rhytismatales; Rhytismataceae; Cyclaneusma.

1 (bases 1 to 1031)
Gernandt, D. S., Platt, J.L., Stone, J.K., Spatafora, J.W., Holst-Jensen, A., Hamelin, R.C. and Kohn, L.M.

Phylogenetics of Helotiales and Rhytismatales based on partial small subunit nuclear ribosomal DNA sequences
Mycologia 93 (5), 915-933 (2001)

2 (bases 1 to 1031)

2 (bases 1 to 1031)

Gernandt, D.S., Platt, J.L., Stone, J.K., Spatafora, J.W., Holst-Jensen, A., Hamelin, R.C. and Kohn, L.M.
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                       ij
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/isolare="OSC56400"
/db_xref="taxon:83478"
<1. >>990
     Pred. No. 11;
); Mismatches
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                                                               128 CGAAGTCGAGGTTTTCAGCATG 107
                                                2 CGAAGTCGAGGCTTTCAGCATG 23
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AF203458.1 GI:9622908
Best Local Similarity 95.5%;
Matches 21; Conservative
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Best Local Similarity 95.5
Matches 21; Conservative
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Dibaeis bacomyces
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TION Aspergillus niger var. awamori gene for 18S rRNA, partial sequence.

Nab030917.

AB030917.

AB030917.

AB030917.

SPERGILLUS niger var. awamori gene for 18S rRNA, partial sequence.

ASPERGILLUS niger var. awamori (strain:IEF2) DNA.

ASPERGILLUS niger var. awamori (strain:IEF2) DNA.

BUKATYOTA; Fungl; Ascomycota; Pezizomycotina; Eurotiomycetes;

Eukaryota; Fungl; Ascomycota; Pezizomycotina; Eurotiomycetes;

Eukaryota; Trifocomaceae; mitosporic Trichocomaceae; Aspergillus.

CE 1 (bases I to 1054)

ASPERGILLUS awamori gene for 18S rRNA, partial sequence

Dublished Only in Database (1999)

E 2 (bases I to 1054)

Direct Submission

L Suhmtani, T. and Matsumoto, Y.

Shintani, T. and Matsumoto, Y.

Shintani, T. and Matsumoto, Y.

Shintani, T. and Matsumoto, Y.

Simhteni, T. and Matsumoto, Y.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Submitted (10-AUG-1999) Tomoyoshi Shintani, Industrial Research Center of Ehime Prefecture, Laboratory of Food Process; 487-2 Kumekubota, Matsuyama, Ehime 791-1101, Japan (E-mail:shintani@iri.pref.ehime.jp, URL:www.iri.pref.ehime.jp, Tel:81-89-976-7612, Fax:81-89-976-7313)
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Amylocarpus encephaloides small subunit rRNA gene.
U45438
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                                                                                                                        /product="small subunit ribosomal
203 c 264 g 289 t
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/organism="Cyclaneusma minus"
%strain="93197"
/specific_host="Pinus sylvestris"
/db_xref="taxon:64355"
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Pred. No. 12;
0; Mismatches
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Pred. No. 12;
0; Mismatches
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/db_xref="taxon:105351"
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                                                                                                                                                                                                                                                                                            /organism="Aspergillus niger"
/isolate="CBS102.12"
/db_xref="taxon:5061"
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/product="18S ribosomal RNA"
/evidence=experimental
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Paecilomyces variotii 18S rRNA gene.
Y13996
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18S ribosomal RNA; 18S rRNA gene.
Paecilomyces variotii.
Paecilomyces variotii
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/db_xref="taxon:45996"
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1. .1673
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Best Local Similarity 95.5%;
Matches 21; Conservative
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2 (bases 1 to 1678)
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    18S ribosomal RNA.
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Direct Submission
Submitted (27-SEP-1996) Botany, National Museum of Natural History,
Smithsonian Institution, NHB-166, 10th St. & Constitution Ave.,
Washington, DC 20560, USA
Location/Qualifiers
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Eukaryota; Fungl; Ascomycota; Pezizomycotina; Leotiomycetes; Helotiales; Helotiales incertae sedis; Amylocarpus.

1 (bases 1 to 1479)

Landvik,S., Shaller,N.F.J. and Eriksson,O.E.
SSU rDNA sequences support for a close relationship between the Elaphomycetales and the Eurotiales and Onygenales
Mycoscience 37, 237-241 (1996)
2 (bases 1 to 1479)
Landvik,S., Shaller,N.F.J. and Eriksson,O.E.
Direct Submission
Submitted (11-JAN-1996) Sara Landvik, Ecological Botany, Umea, S-90187, Sweden
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Eukaryota; Fungi; Ascomycota; Pezizomycotina; Lecanoromycetes;
Lecanoromycetes incertae sedis; Icmadophilaceae; Siphula.
1 (bases 1 to 1648)
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343 c 442 g 439 t
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                                                                                                                                                                                                                                                                        /product="small subunit ribosomal RNA"
300 c 399 q 398 t
                                                                                                                                                                                                        /organism="Amylocarpus encephaloides"/strain="UME 29765"/db_xref="taxon:45428"
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A.niger (1solate CBS102.12) 185 rRNA gene.
X78538 1 GI:469079
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Pred. No. 12;
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/organism="Siphula ceratites"
/db_xref="taxon:53373"
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Local Similarity 95.5%;
les 21; Conservative
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Matches 21; Conserv
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Aspergillus niger.
Aspergillus niger
Bukaryota; Fungi; Ascomycota; Pezizomycotina; Eurotiomycetes;
Eurotiales; Trichocomaceae; mitosporic Trichocomaceae; Aspergillus.

1 (bases 1 to 1673)
Melchers,W.J., Verweij,P.E., van den Hurk,P., van Belkum,A., De Pauw,B.E., Hoogkamp-Korstanje,J.A. and Mels,J.F.
General primer-mediated PCR for detection of Aspergillus species
J. Clin. Microbiol. 32 (7), 1710-1717 (1994)
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Melchers,W.J.G.
Direct Submission
Submitted (25-MAR-1994) W.J.G. Melchers, Department of Medical
Microbiology, University of Nijmegen, P O Box 9101, 6500 HB
Nijmegen, NETHERLANDS
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Zakikhani,S., Okeke,C.N. and Kappe,R.

188 rDNA sequence of Paccilomyces variotil CBS339.51
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1686 bp DNA linear PLN 06-DEC-1999 Distribusion of DEC-1999 Gene, partial sequence.
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Eukaryota; Fungi; Ascomycota; Pezizomycotina; Lecanoromycetes;
Lecanoromycetes incertae sedis; Icmadophilaceae; Dibaeis.
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/organism="Dibaeis baecmyces"
/isolate="cSc33939"
db_xref="taxon:83478"
<1. .>1686
/product="small subunit ribosomal RNA"
a 346 c 438 g 460 t 1 others
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Best Local Similarity 95.5%; Pred. No. 12;
Matches 21; Conservative 0; Mismatches
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Ouery Match 88.7%; Score 20.4; DB 8; Length 1686; Best Local Similarity 95.5%; Pred. No. 12; Matches 21; Conservative 0; Mismatches 1; Indels 0,

Search completed: June 12, 2003, 02:33:53 Job time : 348.269 secs

June 11, 2003, 22:17:41; Search time 117.802 Seconds (without alignments) 439.686 Million cell updates/sec GenCore version 5.1.6 Copyright (c) 1993 - 2003 Compugen Ltd. US-09-674-195C-17 23 1 dcgaagtcgaggctttcagcatg 23 - nucleic search, using sw model Title: Perfect score: Sequence: Scoring table: OM nucleic Run on:

2185239 seqs, 1125999159 residues IDENTITY_NUC Gapop 10.0 , Gapext 1.0 Searched:

4370478 Total number of hits satisfying chosen parameters:

Minimum DB seq length: 0 Maximum DB seq length: 200000000

Post-processing: Minimum Match 0% Maximum Match 100% Listing first 45 summaries

| Sidos | Sido /SIDSZ/gcgdata/geneseqn-embl/NA1997.DAT:*/SIDSZ/gcgdata/geneseqn/geneseqn-embl/NA1998.DAT:*/SIDSZ/gcgdata/geneseqn/geneseqn-embl/NA1999.DAT:*/SIDSZ/gcgdata/geneseqn/geneseqn-embl/NA2090.DAT:*/SIDSZ/gcgdata/geneseqn/geneseqn-embl/NA2000.DAT:*/SIDSZ/gcgdata/geneseqn/geneseqn-embl/NA2001A.DAT:*/SIDSZ/gcgdata/geneseqn/geneseqn-embl/NA2001B.DAT:*/ /SIDS2/gcgdata/geneseq/geneseqn-embl/NA1991.DAT:#/SIDS2/gcgdata/geneseq/geneseqn-embl/NA1991.DAT:#/SIDS2/gcgdata/geneseq/geneseqn-embl/NA1992.DAT:#/SIDS2/gcgdata/geneseq/geneseqn-embl/NA1992.DAT:#/SIDS2/gcgdata/geneseq/geneseqn-embl/NA1993.DAT:#/SIDS2/gcgdata/geneseq/geneseqn-embl/NA1994.DAT:#/SIDS2/gcgdata/geneseq/geneseqn-embl/NA1994.DAT:#/SIDS2/gcgdata/geneseqn-embl/NA1995.DAT:# /SIDS2/gcgdata/geneseq/geneseqn-embl/NA1996.DAT:*/SIDS2/gcgdata/geneseq/geneseqn-embl/NA1997.DAT:* /SIDS2/gcgdata/geneseq/geneseqn-embl/NA2002.DAT:* N_Geneseq_101002 Database

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

STIMMARTES

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ALIGNMENTS

Probe; detection; Histoplasma capsulatum; 185; rRNA; rDNA; hybridisation; Saccharomyces cerevisiae; fungus; phylogenetic; helper probe; soil; water; Blastomyces dermatitidis; quantitation; sample; body fluid; ss. Histoplasma capsulatum-specific DNA hybridisation probe. AAQ73433 standard; DNA; 22 BP 91US-0720587. 91US-0720587 18-MAY-1995 (first entry) (GENP-) GEN-PROBE INC. WPI; 1994-316178/39. 28-JUN-1991; 28-JUN-1991; 04-OCT-1994. Milliman CL; US5352579-A. Synthetic. AAQ73433; AAQ73433

Hybridisation probe specific for Histoplasma capsulatum - allowing differentiation from all other fungi for detection or

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Sequence 22 BP; 5 A; 7 C; 5 G; 5 T; 0 other;
 fluids, tissue samples, soil and water.
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                                                   A probe (AAQ73433) or its complement (AAQ73436) and corresponding RNA sequences (AAQ73437 and AAQ86436) used for the specific detection of all strains of Histoplasma capsulatum (H.c.). The probes are manufactured complementary to the H.c. 1878 or rDNA gene. This region also corresponds to the bases 172-193 of Saccharomyces cerevisiae 188 rRNA. The probe is specific for H.c. and can be used to distinguish the fungus from all others, even its nearest phylogenetic neighbour Blastomyces dermatitidis. Nucleic acid hybridisation of the specific probe is enhanced by the use of helper probes (AAQ73434-5). This method allows the detection and/or the quantitation of H.c. from samples e.g. body
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Pred. No. 0.14;
0; Mismatches 0; Indels
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100.0%; Pred. No. control of Mismatches
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quantitation in body fluids, etc.
                           Claim 4; Column 11; 8pp; English.
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                                                                                                                                             2 CGAAGTCGAGGCTTTCAGCATG 23
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                                                                                                                                                                                 22 CGAAGTCGAGGCTTTCAGCATG 1
                                                                                                                                                                                                                                                                                                                                                                                        AAQ73437 standard; RNA; 22 BP.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 (first entry)
Query Match
Best Local Similarity 100.0
Matches 22; Conservative
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Aspergillus niger.
                                                    WO200056762-A2.
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                                                                                                                                          Probe; detection; Histoplasma capsulatum; 185; rRNA; rDNA; hybridisation; Saccharomyces cerevisiae; fungus; phylogenetic; helper probe; soil; water; Blastomyces dermatitidis; quantitation; sample; body fluid; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    sequences (AA073437 and AA066436) used for the specific detection of all strains of Histoplasma capsulatum (H.c.). The probes are manufactured complementary to the H.c. 188 rRNA or rDNA gene. This region also corresponds to the bases 172-193 of Saccharomyces cervisiae 185 rRNA. The probe is specific for H.c. and can be used to distinguish the fungus form all others, even its nearest phylogenetic neighbour Blastomyces enhanced by the use of helper probes (AA07344-5). This method allows the detection and/or the quantitation of H.c. from samples e.g. body
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Multiple gene expression; filamentous fungal cell; EST; expressed sequence tag; Fusarium venenatum; Aspergillus niger; Aspergillus oryzae; Trichoderma reesel; Identification; recombination; culture condition; environmental stress; spore morphogenesis; metabolic pathway engineering; catabolic pathway engineering; ss.
                                                                                                           Histoplasma capsulatum-specific complementary RNA hybridisation probe.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           A probe (AAQ73433) or its complement (AAQ73436) and corresponding RNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Hybridisation probe specific for Histoplasma capsulatum - allowing differentiation from all other fungi for detection or quantitation in body fluids, etc.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Score 22; DB 15; Length 22;
Pred. No. 0.14;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Sequence 22 BP; 5 A; 5 C; 7 G; 5 U; 0 other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       5; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          fluids, tissue samples, soil and water.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        2 CGAAGTCGAGGCTTTCAGCATG 23
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Claim 9; Column 13; 8pp; English.
               AAQ86436 standard; RNA; 22 BP.
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ID AAF11545 standard; cDNA; 568
                                                                                                                                                                                                                                                                                                                                            91US-0720587.
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Best Local Similarity 77.3%;
Matches 17; Conservative
                                                                                                                                                                                                                                                                                                           91US-0720587
                                                                                 (first entry)
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                                                                                                                                                                                                                                                                                                                                                                          (GENP-) GEN-PROBE INC.
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                                                                                                                                                                                                                                                                                                           28-JUN-1991;
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                                                                              18-MAY-1995
                                                                                                                                                                                                                                                                             04-OCT-1994.
                                                                                                                                                                                                                                                                                                                                                                                                           Milliman CL;
                                                                                                                                                                                                                                            US5352579-A
                                                                                                                                                                                                              Synthetic.
                                               AAQ86436;
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AAQ86436
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The present invention describes a method for monitoring differential expression of genes in a first filamentous fungal (FF) cell relative to expression of the same genes in one or more second filamentous fungal cells. The method uses fluorescence-labeled nucleic acids isolated from the FF cells and a substrate of expressed sequence tags (BST). The ESTS care used in the methods for monitoring differential expression of the same genes in one or more second filamentous fungal cells. Monitoring the global expression of genes from FF cells allows the production of potential of the microorganisms to be improved. New genes may be consible functions of unknown open reading frames can be discovered, possible functions of unknown open reading frames can be computated and gene copy number variation and stability can be monitored. The expression of genes can be used to study how FF cells adapt to changes in culture conditions, environmental stress, spore continuation of papers can be used to study how FF cells adapt to changes in culture conditions, environmental stress, spore confinential using ESTS provides several advantages over genomic or random cDNA clones including elimination of redundancy as one spot on an example of the results. AAF11247 represents ESTS from Aspergillus or canalysis of the results. AAF124878 represents ESTS from AAF14879 to AAF14879 to AAF14878 represents ESTS from AAF14879 to AAF14879 to AAF14879 represents ESTS from AAF14879 to A
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Monitoring differential expression of genes in filamentous fungal celluses fluorescence-labeled nucleic acids isolated from the cells and a
                                                                                                                                                                                                                                                                                                                                                                                                                                                            Olsen PB;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Gaps
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invasive infection; haematology; immune system suppression; ss.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                  Shuster JR, Kauppinen S, Clausen IG,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Sequence 568 BP; 155 A; 116 C; 141 G; 150 T; 6 other;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              substrate of expressed sequence tags -
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      178 CGAAGTCGAGGTTTTCAGCATG 157
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                                                                                                                                                                                                                                                                                                 (NOVO ) NOVO NORDISK BIOTECH INC. (NOVO ) NOVO NORDISK AS.
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                                                                                             22-MAR-2000; 2000WO-US07781.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               WPI; 2000-594572/56
                                                                                                                                                                                                                                                                                                                                                                                                                                            Berka RM, Rey MW,
                                                                                                                                                                                               22-MAR-1999;
28-SEP-2000.
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The invention relates to evaluating strain variation within and between different populations of the tuberculosis bacterial pathogen, Mycobacterium tuberculosis or related Mycobacterium by determining the nucleotide sequence of the first strain at positions in the complete sequence of the genome that correspond to positions that differ in the nucleotide sequences of M. tuberculosis strains CDC 1551 (AA199683) and H37Rv (AA199682). The method is useful for evaluating strain variation of M. tuberculosis and has valuable application in the fields of tuberculosis genetics, epidemiology, patient treatment and epidemic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Sequence 4403765 BP; 757105 A; 1447799 C; 1441301 G; 757371 T; 189 other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Note: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format directly from USPTO at seqdata.uspto.gov/sequence.html?DocID=6294328B1.
                                                                                                                             Evaluating strain variation of Mycobacterium tuberculosis, comprises determining the nucleotide sequence of the strain at positions in the genome corresponding to positions where M. tuberculosis strains CDC 1551 and H37Rv differ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Evaluating strain variation of Mycobacterium tuberculosis, comprises determining the nucleotide sequence of the strain at positions in the genome corresponding to positions where M. tuberculosis strains CDC 1551 and H37RV differ
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                                                                                                                                                                                                                                                  Claim 4; SEQ ID NO 2; 3pp + Sequence Listing; English.
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                                                Venter JC;
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                                              Fraser CM,
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ilarity 82.6%;
Conservative
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                                              White OR,
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(GENO-) INST GENOMIC RES.
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                                                                                        WPI; 2001-647261/74.
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Best Local Similarity
Matches 19; Conserv
                                              Fleischmann RD,
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  monitoring.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    This invention describes a novel method for detecting Aspergillus nucleic acid (1) in a body sample which comprises the isolation of (1) followed by a two-step polymerase chain reaction (PCR) amplification of any nucleic acid having a sequence essentially homologous to part of the 3'-end of the Aspergillus 18s rRNA gene using primers used in the first step that do not overlap with those in the second step. The method is used for early diagnosis, and monitoring, of aspergillosis, particularly invasive infections in hematological-oncological patients with long-term coupression of the immune system. Unlike the known method using overlapping primers, this process provides efficient and reliable detection of Aspergillus in clinical situations. It is specific for Aspergillus (it detects the species terreus, niger, versicolor, clavatus, than gamens, and fundiatus, but not oryzae, nor bacteria or fungi from any other genera). This sequence represents the DNA sequence of Aspergillus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ö
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ö
                                                                                                                                                                                                                                                                                                                                                                                                     Detecting Aspergillus nucleic acid in body samples by two-step polymerase chain reaction, for diagnosing aspergillosis
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               .:
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Pred. No. 10;
0; Mismatches
                                                                                                                                                                                                                                                                                                                   Skladny H;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     153 CGAAGTCGAGGTTTTTAGCATG 132
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   AAI99683 standard; DNA; 4403765 BP
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Claim 2; Fig 1; 16pp; German.
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Local Similarity 90.9%;
Les 20; Conservative (
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      98US-0103840.
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                                                                                                                                                                              98DE-1006274
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            (first entry)
                                                                                                                                                                                                                                                                                                               Buchheidt D, Hehlmann R,
Aspergillus fumigatus
                                                                                                                                                                                                                           (BUCH/) BUCHHEIDT D.
                                                                                                                                                                                                                                                                                                                                                           WPI; 1999-470047/40.
                                                                                                                                                                                                                                                  HEHLMANN R.
                                                                                                                                                                                                                                                                       (SKLA/) SKLADNY H.
                                            DE19806274-A1
                                                                                                                                  16-FEB-1998;
                                                                                                                                                                              16-FEB-1998;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         15-JAN-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             US6294328-B1
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                                                                                      19-AUG-1999
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         25-SEP-2001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             AA199683;
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Matches

RESULT 7 AA199683

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ABA44550 standard; DNA; 454 BP.

ABA44550/

(first entry)

01-FEB-2002

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ABA44550;

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The invention relates to evaluating strain variation within and between different populations of the tuberculosis bacterial pathogen, Mycobacterium tuberculosis or related Mycobacterium by determining the nucleotide sequence of the first strain at positions in the complete sequence of the genome that correspond to positions that differ in the nucleotide sequences of M. tuberculosis strains CDC 1551 (AAI99683) and H37Rv (AAI99682). The method is useful for evaluating strain variation of M. tuberculosis and has valuable application in the fields of
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Burkholderis genus producing aldonic acid and oxidising specifically the hemiacetal hydroxy group of a saccharide having said hydroxy group. Aldonic acid is used as a mineral reinforcing agent. The present sequence
                                                                                                                                                                                        Note: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format directly from USPTO at segdata.uspto.gov/sequence.html?DocID=6294328B1.
                                                                                                                                                                                                                                                            Sequence 4411529 BP; 758565 A; 1449983 C; 1444602 G; 758379 T; 0 other;
                                                                                                                                                                                                                                                                                                                                     Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     A new microbe for producing aldonic acid, comprises a new strain of Acinetobacter or Burkholderis -
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           The present invention relates to a new microbe of Acinetobacter or
                                                                                                                                                                                                                                                                                                  Length 4411529;
                                                                                                                                                                                                                                                                                                                                   ö
                                                                                                                                                                                                                                                                                                                                     Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Sequence 1745 BP; 448 A; 382 C; 465 G; 450 T; 0 other;
                                                                                                                                                                                                                                                                                              Score 17.4; DB 22;
Pred. No. 1.1e+02;
1; Mismatches 3;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                was used to illustrate the present invention
                                                                                                                                                                                                                                                                                              Match 75.7%; Score 17.4; I Local Similarity 82.6%; Pred. No. 1.1e es 19; Conservative 1; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                      Deuteromycetes polynucleotide SEQ ID 1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Disclosure; Page 17; 22pp; Japanese.
                                                                                                                                                                                                                                                                                                                                                                    1 DCGAAGTCGAGGCTTTCAGCATG 23
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               (TAKE-) TAKEHARA KAGAKU KOGYO KK
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ABA01152 standard; DNA; 1745 BP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             26-DEC-2000; 2000JP-0394766
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              99JP-0369714
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  (first entry)
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 (OSAO ) OSAKA CITY.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Deuteromycetes sp.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         JP2001245657-A
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                                                                                                                                                                           monitoring.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ABA01152;
                                                                                                                                                                                                                                                                                              Query Match
                                                                                                                                                                                                                                                                                                                                 Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                            RESULT 9
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encode proteins. They are useful for gene discovery, and for determining predisposition and/or prognosing breast disease. Gene expression analysis is useful for assessing the toxicity of chemical agents on cells. The microarray of this invention presents a far greater diversity of probes for measuring gene expression, with far less bias than expressed sequence tag microarrays. The method is suitable for rapid production of functional information from genomic sequence. The present sequence data for this patent did not form part of the invention. Note: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format directly
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               nucleic acid probes for measuring gene expression in a sample derived from human breast and BT 474 cells. The method involves contacting the probes with a collection of detectably labelled nucleic acids derived from mRNA of human breast, and then measuring the label bound to each probe of the microarray. The probes are useful for verifying the expression of regions of genomic DNA predicted to
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   invention relates to a spatially-addressable set of single exon
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              New spatially-addressable set of single exon nucleic acid probes, useful for measuring gene expression in sample derived from human breast, comprises number of single exon nucleic acid probes
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ö
                                                                                                                    single exon probe; gene expression; breast;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                DB 22; Length 454;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Claim 1; SEQ ID NO 3245; 327pp + sequence listing; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Indels
                                                                                 Human breast cell single exon nucleic acid probe #3245.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           irom WIPO at ftp.wipo.int/pub/published_pct_sequences
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Sequence 454 BP; 135 A; 84 C; 120 G; 115 T; 0 other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ;
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; Mismatches
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Rank DR;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ö
                                                                                                                                                                                                                                                                                                                                                                                                                                              (MOLE-) MOLECULAR DYNAMICS INC.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Chen W,
                                                                                                                                                                                                                                                                                                                                                        2000US-0632366.
2000US-0234687.
                                                                                                                                                                                                                                                                                                                                                                                           27-SEP-2000; 2000US-0236359.
04-OCT-2000; 2000GB-0024263.
                                                                                                                                                                                                                                                                       30-JAN-2001; 2001WO-US00662
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Hanzel DK,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                WPI; 2001-496933/54.
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ses 18; Conserv
                                                                                                                    microarray;
                                                                                                                                      disease; cancer;
                                                                                                                                                                                                    WO200157271-A2
                                                                                                                                                                    Homo sapiens.
                                                                                                                                                                                                                                                                                                                                                                             -SEP-2000;
                                                                                                                                                                                                                                                                                                          04-FEB-2000;
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Gaps

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3;

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167 CGAAGTCGGGGTTTTTAGCATG 146

2 CGAAGTCGAGGCTTTCAGCATG 23

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DB 24; Length 1745;

Score 17.2; DF

74.8%; 86.4%;

Best Local Similarity 86.4 Matches 19; Conservative

Query Match

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Homo sapiens.
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        a
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                                                                                                                                                                                                              Human; foetal liver; gene expression; single exon nucleic acid probe; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      The invention relates to a single exon nucleic acid probe for measuring human gene expression in a sample derived from human foetal liver. The single exon nucleic acid probes may be used for predicting, measuring and displaying gene expression in samples derived from human fetal liver. The present sequence is a single exon nucleic acid probe for the invention.

Note: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format directly from WIPO at ftp.wipo.int/pub/published_pct_sequences.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Probe #3226 for gene expression analysis in human heart cell sample.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Human genome-derived single exon nucleic acid probes useful for analyzing gene expression in human fetal liver -
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Indels
                                                                                                                                                                    foetal liver single exon nucleic acid probe #3302.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Sequence 454 BP; 135 A; 84 C; 120 G; 115 T; 0 other;
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0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 73.0%; Score 16.8; 90.0%; Pred. No. 90
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Chen W, Rank DR;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      4 AAGTCGAGGCTTTCAGCATG 23
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               (MOLE-) MOLECULAR DYNAMICS INC.
                                         ABA54997 standard; DNA; 454 BP
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2000US-0234687.
2000US-0236359.
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2000US-0608408.
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                                                                                                                                                                                                                                                                                                                                                                                                                          2000US-0180312
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     2000GB-0024263
                                                                                                                             (first entry)
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Matches 18; Conservative
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              WPI; 2001-483447/52.
                                                                                                                                                                                                                                                                                               WO200157277-A2.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      03-AUG-2000;
21-SEP-2000;
27-SEP-2000;
04-OCT-2000;
                                                                                                                           01-FEB-2002
                                                                                                                                                                                                                                                        Homo saplens
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30-JUN-2000;
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                                                                                   ABA54997;
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                                                                                                                                                                         Human
RESULT 11
ABA54997/c
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                                                                                   NAME OF THE PROOF 
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   EXAXAXA
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The present invention relates to single exon nucleic acid probes for measuring human gene expression in a sample derived from human heart. The present sequence is one such probe. The probes may be used for predicting, measuring and displaying gene expression in samples derived from the human heart via microarrays. By measuring gene expression, the probes are useful for predicting, diagnosing, grading, staging, monitoring and prognosing diseases of the human heart and vascular system e.g. cardiovascular disease. hypertension, cardiac arrhythmias and congenital heart disease. Nepertension, cardiac arrhythmias and specification, but was obtained in electronic format directly from WIPO at fip.wipo.int/pub/published_pct_sequences.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Single exon nucleic acid probes for analyzing gene expression in human hearts -
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Gaps
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           DB 22; Length 454;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Human brain expressed single exon probe SEQ ID NO: 3257.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Claim 1; SEQ ID No 3226; 530pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                          Rank DR;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  201 AAGTAGAGGCTTTCTGCATG 182
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                                                                                                                                                                                                                                                                                                                                                                                  (MOLE-) MOLECULAR DYNAMICS INC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              BP
                                                                                                                                                                                                                                                                                                                                                                                                                                       Hanzel DK, Chen W,
                                                                                                                                                              2000US-0180312.
2000US-0207456.
2000US-0608408.
2000US-0632366.
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                                                                                                                                                                                                                                                                      21-SEP-2000; 2000US-0234687.
27-SEP-2000; 2000US-0236359.
04-OCT-2000; 2000GB-0024263.
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90.0%;
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ID AAK03266 standard; DNA; 454
                                                                                                        30-JAN-2001; 2001WO-US00666
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       epilepsy; cancer; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          WPI; 2001-488899/53
WO200157274-A2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             WO200157275-A2.
                                                                                                                                                                                                                 30-JUN-2000;
03-AUG-2000;
21-SEP-2000;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Homo sapiens
                                                                                                                                                                 04-FEB-2000;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   05-NOV-2001
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                                                     09-AUG-2001
                                                                                                                                                                                                                                                                                                                                                                                                                                       Penn SG,
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Gaps

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Indels

DB 22; Length 454;

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The present invention provides a number of single exon nucleic acid probes which are derived from genomic sequences expressed in the human bone marrow. They can be used to measure gene expression in bone marrow samples, which may enable the improved diagnosis and treatment of cancers such as lymphoma, leukaemia and myeloma. The present sequence is one of
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     (SENP). The present sequence is one such probe. The SENPS are derived from human HeLa cells. The SENPs can be used to produce a single exon microarray, which can be used for measuring human gene expression in a sample derived from human cervical epithelial cells. By measuring gene expression, the probes are therefore useful in grading and/or staging of diseases of the cervix, notably cervical cancer.

Note: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format directly from WIPO
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Probe #3229 for gene expression analysis in human cervical cell sample.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          The present invention relates to human single exon nucleic acid probes
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                human; microarray; gene expression; cervical epithelial cell;
             Human genome-derived single exon nucleic acid probes useful for
                                                         Example 4; SEQ ID NO: 3276; 658pp + Sequence Listing; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Human genome-derived single exon nucleic acid probes useful f
analyzing gene expression in human cervical epithelial cells
                                                                                                                                                                                       Sequence 454 BP; 135 A; 84 C; 120 G; 115 T; 0 other;
                               analyzing gene expression in human bone marrow
                                                                                                                                                                                                                                               0; Mismatches
                                                                                                                                                                                                                 73.0%; Score 16.8; 90.0%; Pred. No. 90;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Claim 25; SEQ ID No 3229; 487pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Chen W, Rank DR;
                                                                                                                                                                                                                                                                                              201 AAGTAGAGGCTTTCTGCATG 182
                                                                                                                                                                                                                                                                            4 AAGTCGAGGCTTTCAGCATG 23
                                                                                                                                                                                                                                                                                                                                                                                 Bb
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                                                                                                                                                          the probes of the invention.
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2000US-0207456
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                2000GB-0024263
                                                                                                                                                                                                                                                                                                                                                                                AAI13296 standard; DNA; 454
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              30-JAN-2001; 2001WO-US00670
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                                                                                                                                                                                                                                                                                                                                                                                                                                        (first entry)
                                                                                                                                                                                                               Query Match
Best Local Similarity 90.0 Matches 18; Conservative
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      WPI; 2001-488901/53
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 cervical cancer; ss
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       WO200157278-A2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Homo sapiens.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     03-AUG-2000;
21-SEP-2000;
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30-JUN-2000;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Penn SG,
                                                                                                                                                                                                                                                                                                                                                                                                             AAI13296;
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                                                                                                                                                                                                                                                                                                      셤
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                                                                                                                                                                                                                                                                                                    probes which are derived from genomic sequences expressed in the human brain. They can be used to measure gene expression in brain cell samples, which may enable the diagnosis and improved treatment of nervous system diseases such as Alzheimer's disease, multiple sclerosis, schizophrenia, epilepsy and cancers. The present sequence is one of the probes of the
                                                                                                                                                                                                                  Single exon nucleic acid probes for analyzing gene expression in human
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Gaps
                                                                                                                                                                                                                                                                                          provides a number of single exon nucleic acid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Human; bone marrow expressed exon; gene expression analysis; probe;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ö
                                                                                                                                                                                                                                                           Example 4; SEQ ID NO: 3257; 650pp + Sequence Listing; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Human bone marrow expressed single exon probe SEQ ID NO: 3276.
                                                                                                                                                                                                                                                                                                                                                                                                                                        DB 22; Length 454;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 microarray; cancer; leukaemia; lymphoma; myeloma; ss
                                                                                                                                                                                                                                                                                                                                                                                                          Sequence 454 BP; 135 A; 84 C; 120 G; 115 T; 0 other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  7
                                                                                                                                                                                                                                                                                                                                                                                                                                       Score 16.8; Pred. No. 90;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Щ,
                                                                                                                                                            Rank DR;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              201 AAGTAGAGGCTTTCTGCATG 182
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               4 AAGTCGAGGCTTTCAGCATG 23
                                                                                                                               (MOLE-) MOLECULAR DYNAMICS INC.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Chen W,
                                                      20000S-0632366.
20000S-0234687.
20000S-0236359.
2000GB-0024263.
                                                                                                                                                          Chen W,
                                                                                                                                                                                                                                                                                                                                                                                                                                       73.0%;
90.0%;
            2000US-0180312.
2000US-0207456.
2000US-0608408.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                AAK28719 standard; DNA; 454
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                  18; Conservative
                                                                                                                                                                                                                                                                                          The present invention
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Penn SG, Hanzel DK,
                                                                                                                                                          Hanzel DK,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            WPI; 2001-488900/53
                                                                                                                                                                                    WPI; 2001-483446/52
                                                                                                                                                                                                                                                                                                                                                                                                                                                    Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          WO200157276-A2
                                                      03-AUG-2000;
21-SEP-2000;
27-SEP-2000;
04-OCT-2000;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               04-FEB-2000;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             30-JUN-2000;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          11-SEP-2000;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       04-OCT-2000;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         06-NOV-2001
                                          30-JUN-2000;
                            26-MAY-2000;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     09-AUG-2001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                26-MAY-2000
                                                                                                                                                                                                                                                                                                                                                                                 invention.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              AAK28719;
                                                                                                                                                                                                                                                                                                                                                                                                                                     Query Match
                                                                                                                                                          Penn SG,
                                                                                                                                                                                                                                 brains
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Matches
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for

at ftp.wipo.int/pub/published_pct_sequences.

Sequence 454 BP; 135 A; 84 C; 120 G; 115 T; 0 other;

Gaps

ő Ouery Match 73.0%; Score 16.8; DB 22; Length 454; Best Local Similarity 90.0%; Pred. No. 90; Matches 18; Conservative 0; Mismatches 2; Indels 0;

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Search completed: June 12, 2003, 01:44:26 Job time : 134.802 secs

GenCore version 5.1.6 Copyright (c) 1993 - 2003 Compugen Ltd.

OM nucleic - nucleic search, using sw model

June 12, 2003, 01:18:34 ; Search time 22.066 Seconds (without alignments) 319.658 Million cell updates/sec Run on:

Title: Perfect score: Sequence:

US-09-674-195C-17 23 1 dcgaagtcgaggctttcagcatg 23

IDENTITY_NUC Gapop 10.0 , Gapext 1.0 Scoring table:

882724 Total number of hits satisfying chosen parameters:

441362 seqs, 153338381 residues

Searched:

Minimum DB seq length: 0 Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0% Maximum Match 100% Listing first 45 summaries

Database :

Issued_Patents_NA:*
1: /cgn2_6/ptodata/1/ina/5A_COMB.seq:*
2: /cgn2_6/ptodata/1/ina/5B_COMB.seq:*
3: /cgn2_6/ptodata/1/ina/6A_COMB.seq:*
4: /cgn2_6/ptodata/1/ina/6B_COMB.seq:*
5: /cgn2_6/ptodata/1/ina/PCTUS_COMB.seq:*
6: /cgn2_6/ptodata/1/ina/PCTUS_COMB.seq:*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

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Gaps

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Ouery Match
95.7%; Score 22; DB 1; Length 22;
Best Local Similarity 100.0%; Pred. No. 0.019;
Matches 22; Conservative 0; Mismatches 0; Indels

Sequence 18, Appl Sequence 18, Appl Sequence 18, Appl	1,4,4	Sequence 1, Appli Sequence 13, Appl Sequence 13, Appl Sequence 13, Appl Sequence 13, Appl Sequence 14, Appl Sequence 18, Appl Sequence 18, Appl Sequence 28, Appl Sequence 28, Appl	Sequence 1, Appli
US-09-166-093-18 US-09-172-019-18 US-09-166-094-18	US-08-055-945-1 US-08-148-910-14 US-08-448-937A-14 US-09-645-073-1	US-08-411-706-1 US-08-920-812-13 US-08-920-827-13 US-08-921-177-13 US-08-920-828-13 US-08-920-828-13 US-08-390-878-18 US-09-103-840A-2 US-09-221-017B-1065 US-08-998-416-281	US-08-899-011-1 ALIGNMENTS
1460 3 1460 3 1460 3	1722 2033 1 2033 1 2293 4	870 1 9515 1 9515 1 9515 1 9515 1 9515 1 403765 4	1029 2
68.7 68.7 68.7	68.7 67.8 67.8 67.8	67.0 67.0 67.0 67.0 67.0 67.0 66.1	64.3
15.8 15.8 15.8	15.6 15.6		14.8
C 28	. 0 0 0	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	4

10	SULT 1 -07-720-587A-1 -07-720-587A	GENERAL INFORMATION: GENERAL INFORMATION: APPLICANT: Curt L. Milliman TITLE OF INVENTION: NUCLEIC ACIDS PROBES TITLE OF INVENTION: TO HISTOPLASMA CAPSULATUM	CORRESPONDENCES: 3 CORRESPONDENCE ADDRESS: ADDRESSEE: Los Angeles STREET: California COUNTRY: USA	FER READABLE FORM: UM TYPE: 3.5" Diskette, 1.44 DTTER: 18M PS/2 Model 502 or AATING SYSTEM: 1BM P.C. DOS (WARE: WordPerfect (Version 5 TY APPLICATION DATA: ING DATE: 19910628 SIFICATION: 435 SIFICATION DATA:	APPI APPI ING I ING I WEY/P ISTRA STRA STRA STRA STRA STRA STRA STRA	TELEFAX: (213) 955-0440 TELEAX: 67-3510 INFORMATION FOR SEQ ID NO: 1: SEQUENCE CHARACTERISTICS: LENGTH: 22 LENGTH: 22 STRANDEDNESS: single TOPOLOGY: linear
RESULT 1 Sequence 1, Sequence 1, Sequence 1, Sequence 1, Sequence 1, TITLE 01 TITLE	RESULT 1 US-07-720-587A-1 ; Sequence 1, Ap	GENERAL IN APPLICAN TITLE OF	NUMBER (CORRESPONDES) STREES STREES STATE	COMPUTER MEDIUM MEDIUM COMPUTER COMPERATI COMPUTER COMPUTER PAPPLIC FILING COMPUTER PAPPLIC FILING PRIOR ASI	PRIOR AF PRIOR AF PRIOR AF PRIOR AF PRICING ATTORNEY REGIST REGIST TELECOM	TELEFAX: TELEX: TELEX: INFORMATION E SEQUENCE CH LENGTH: TYPE: NU STANDEDN TOPOLOGY: US. 07-720-587A-1

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Sequence 13, Application US/08224591
Patent No. 5856456
GENERAL INFORMATION
APPLICANT: Whitlow, Marc
APPLICANT: Filpula, David
TITLE OF INVENTION: Linker For Linked Fusion Polypeptides
NUMBER OF SEQUENCES: 25
CORRESPONDENCE ADDRESS:
ADDRESSEE: Sterne, Keesler, Goldstein & Fox
STREET: 1100 New York Avenue, Suite 600
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   APPLICANT: Wood, James F.
APPLICANT: Wood, James F.
APPLICANT: Hardman, Karl
APPLICANT: Bird, Robert
APPLICANT: Filpula, Board
TITLE OF INVENTION: Multivalent Antigen-Binding Proteins
NUMBER OF SEQUENCES: 23
CORRESPONDENCE ADDRESS:
ADDRESSEE: Sterne, Kessler, Goldstein & Fox P.L.L.C.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ADDRESSEE: Sterne, Kessler, Goldstein & Fox P.L.L.C.
STREET: 1100 New York Avenue, NW
CITY: Washington
                                                                                                                                                                                                                                                                                                                    COMPUTER READABLE FORM:

MEDIUM TYPE: Floppy disk

MEDIUM TYPE: Floppy disk

COMPUTER: IBM PC compatible

COMPUTER: IBM PC compatible

COMPUTER: IBM PC compatible

OPERATING SYSTEM: PC-DOS/MS-DOS

SOFTWARE: Patentin Release #1.0, Version #1.25

SURRENT APPLICATION DATA:

APPLICATION NUMBER: US/08/224,591

FILING DATE: Herewith

CLASSIFICATION NUMBER: US 08/002,845

FILING DATE: 15-JAN-1993

APPLICATION NUMBER: US 07/980,529

FILING DATE: 20-NOY-1592

ATTORNEY/AGENT INFORMATION:

NAME: GOLGStein, JOTGE A.

REGISTRATION NUMBER: 29,021

RELECOMMUNICATION INFORMATION:

TELECHOME: (202) 3313-2600
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             68.7%; Score 15.8;
89.5%; Pred. No. 44
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Sequence 22, Application US/08392338A Patent No. 5869620
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      350 GAAGTAGAGCCTTTCAGCA 332
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TELEPHONE: (202) 371-2600
TELEFAX: (202) 371-2540
INFORMATION FOR SEQ ID NO: 13:
SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Whitlow, Marc
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Query Match 68.7
Best Local Similarity 89.5
Matches 17; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     738 base pairs
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TYPE: nucleic acid
STRANDEDNESS: both
                                                                                                                                                                                                                                                      CITY: Washington STATE: D.C.
                                                                                                                                                                                                                                                                                                          U.S.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          STRANDEDNESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 RESULT 5
US-08-392-338A-22/c
US-08-224-591-13/c
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             STATE:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            OTHER INFORMATION: CDC 1551
OTHER INFORMATION: "n" bases at various positions throughout the sequence
OTHER INFORMATION: represent a, t, c or g
                                                                                                                                                                                                                                                   APPLICANT: WHITE, Owen R.
APPLICANT: FRASER, Claire M.
APPLICANT: FRASER, Claire M.
APPLICANT: VENTER, Observed M.
TITLE OF INVENTION: TUBERCULOSIS
FILE REFERENCE: 2436-20007.00
CURRENT APPLICATION NOMBER: US/09/103,840A
CURRENT FILING DATE: 1998-06-24
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    APPLICANT: WHITE, Owen R.
APPLICANT: FRASER, Claire M.
APPLICANT: VENTER, Claire M.
APPLICANT: VENTER, Claire M.
TITLE OF INVENTION: TUBERCULOSIS
FILE REFERENCE: 24366-20007.00
CURRENT APPLICATION NUMBER: US/09/103,840A
CURRENT FILING DATE: 1998-06-24
NUMBER OF SEQ ID NOS: 2
SOFTWARE: PATENTIN VEY: 2.1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     DB 4; Length 4403765;
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Fred. No. 21;
1; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Score 17.4; D. Pred. No. 21; 1; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               171880 rcgcrgrcgAggcrrrcAccArg 171902
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TYPE: DNA
ORGANISM: Mycobacterium tuberculosis
OTHER INFORMATION: H37Rv
US-09-103-840A-1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1 DCGAAGTCGAGGCTTTCAGCATG 23
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TYPE: DNA
ORGANISM: Mycobacterium tuberculosis
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1 DCGAAGTCGAGGCTTTCAGCATG 23
                        CGAAGTCGAGGCTTTCAGCATG 22
CGAAGTCGAGGCTTTCAGCATG 23
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                                                                                                                                                        Sequence 2, Application US/09103840A
Patent No. 6294328
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 GENERAL INFORMATION:
APPLICANT: FLEISCHMAN, Robert D.
APPLICANT: WHITE, OWEN R.
                                                                                                                                                                                                                                     APPLICANT: FLEISCHMAN, Robert D.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Query Match 75.7%;
Best Local Similarity 82.6%;
Matches 19; Conservative 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              75.7%;
82.6%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                    NUMBER OF SEQ ID NOS: 2
SOFTWARE: Patentin Ver. 2.1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Query Match
Best Local Similarity
Matches 19; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       LENGTH: 4411529
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      LENGTH: 4403765
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    US-09-103-840A-2
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Gaps

Indels

RESULT

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Length 738;

DB 2;

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GENERAL INFORMATION:
APPLICANT: Whitlow, Marc
APPLICANT: Wood, James F.
APPLICANT: Hardman, Karl
APPLICANT: Bird, Robert
APPLICANT: Bird, Robert
APPLICANT: Filpula, David
APPLICANT: Rollence, Michelle
TITLE OF INVENTION: Methods for Producing Multivalent Antigen-Binding
TITLE OF INVENTION: Proteins
NUMBER OF SEQUENCES: 23
CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                DB 2; Length 738;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         SOFTWARE: Patentin Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/09/166,750
FILING DATE: Herewith
CLASSIFICATION:
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/392,338
FILING DATE: 22-FEB-1995
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 07/989,846
FILING DATE: 20-NOV-1992
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 07/996,936
FILING DATE: 25-NOV-1991
ATTORNEY/AGENT INFORMATION:
                            PRIOR APPLICATION DATA:

APPLICATION NUMBER: US 07/980,529
FILING DATE: 20.NOV-1992
ATTORNEY/AGENT INFORMATION:
NAME: Goldstein, Jorge A.
REGISTRENCE/DOCKET NUMBER: 29,021
REGISTRENCE/DOCKET NUMBER: 99,021
REFERENCE/DOCKET NUMBER: 99,021
REFERENCE/DOCKET NUMBER: 29,021
REFERENCE/DOCKET NUMBER: 29,021
REFERENCE/DOCKET NUMBER: 29,021
REFERENCE (202) 371-260
TELEPAX: (202) 371-260
TELEPAX: (202) 371-2560
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Score 15.8; D
Pred. No. 44;
0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Sequence 22, Application US/09166750 Patent No. 6025165
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     350 GAAGTAGAGCCTTTCAGCA 332
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        3 GAAGTCGAGGCTTTCAGCA 21
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Query Match 68.7%;
Best Local Similarity 89.5%;
Matches 17; Conservative
               15-JAN-1993
                                                                                                                                                                                                                                                                                                                                                                                                                                                            CDS
join(1..726)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                COUNTRY: U.S.A. ZIP: 20005
                                                                                                                                                                                                                                                                                                                                                                                                        TOPOLOGY: both FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            RESULT 7
US-09-166-750-22/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                       ; NAME/KEY:
; LOCATION:
US-08-926-789-13
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APPLICANT: Filpula, David
APPLICANT: Filpula, David
TITLE OF INVENTION: Linker For Linked Fusion Polypeptides
NUMBER OF SEQUENCES: 25
CORRESPONDENCE ADDRESS:
ADDRESSEE: Sterne, Kessler, Goldstein & Fox
STREET: 1100 New York Avenue, Suite 600
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Indels
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COUNTRY: U.S.A.
21P: 20005
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/926,789
                                                                   MEDIUM TYPE: Floppy disk
COMPUTER: IBM FC COMPATIBLE
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.25
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       DB 2;
                                                                                                                                                   SUTREMENT APPLICATION DATA:
CURRENT APPLICATION DATA:
APPLICATION NOTABER: US/08/392,338A
FILING DATE: 22-FEB-1995
CLASSIFICATION: 435
PRIOR APPLICATION DATA:
APPLICATION NOTABER: US 07/989,846
FILING DATE: 20-NOV-1992
PRIOR APPLICATION DATA:
APPLICATION NOTABER: US 07/96,936
FILING DATE: 20-NOV-1991
ATTORNEY AGENT INFORMATION:
NAME: Goldstein, Jorge A.
REGISTRATION NOTABER: 0977.0030007
TELEPHONE: (202) 371-260
TELEPHONE: (202) 371-250
TELEPHONE: (202) 371-250
TELEPHONE: (202) 371-250
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Query Match 68.7%; Score 15.8; E
Best Local Similarity 89.5%; Pred. No. 44;
Matches 17; Conservative 0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        FILING DATE:
APPLICATION NUMBER: US 08/002,845
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Sequence 13, Application US/08926789
Patent No. 5990275
GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          PRIOR APPLICATION DATA:
APPLICATION NUMBER: 08/224,591
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        350 GAAGTAGAGCCTTTCAGCA 332
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      LENGTH: 738 base pairs
                                              COMPUTER READABLE FORM:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TYPE: nucleic acid
STRANDEDNESS: both
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        NAME/KEY: CDS
LOCATION: 1..726
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               CITY: Washington STATE: D.C.
U.S.A.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        US-08-926-789-13/c
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ; LOCATION:
US-08-392-338A-22
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Sequence 22, Application US/09172019

SEQUENCE OF SEQUENCE CONTRIBUTION: Marchard Management Control of TITLE OF INVENTION: Nucleic Acid Molecules Encoding Single-Chain TITLE OF INVENTION: Antigen-Binding Proteins (As Amended)

NUMBER OF SEQUENCES: 23

CORRESPONDENCE ADDRESSE: Sterne, Kessler, Goldstein & Fox P.L.L.C.

STREET: 1100 New York Avenue, NW
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Score 15.8; DB 3; Length 738;
Pred. No. 44;
                                                                                                                                                           Score 15.8; DB 3; Length 738;
Pred. No. 44;
                                                                                                                                                                                                           Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CITY: Washington STATE: D.C.
CONNINY: U.S.A.
ZIP: 20005
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC COMPATIBLE
COMPUTER: PATENTIN PC-DOS/MS-DOS
SOFTWARE: PATENTIN Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
                                                                                                                                                                                                         0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                PRICE APPLICATION:
PRICE APPLICATION
APPLICATION NUMBER: US 08/392,338
FILING DATE: 22-FEB-1995
PRICE APPLICATION DATA:
APPLICATION NUMBER: US 07/989,846
FILING DATE: 20-NOV-1992
PRICE APPLICATION DATA:
APPLICATION NUMBER: US 07/796,936
FILING DATE: 25-NOV-1991
ATTORNEY/AGENT INFORMATION:
NAME: GOLGSTEATION NUMBER: 29,021
REGISTRATION NUMBER: 29,021
REGISTRATION NUMBER: 29,021
REFENCE/DOCKET NUMBER: 0977.003000
TELEPHONE: (202) 371-2600
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 APPLICATION NUMBER: US/09/172,019 FILING DATE: Herewith
                                                                                                                                                                                                                                                                                  350 GAAGTAGAGCCTTTCAGCA 332
                                                                                                                                                                                                                                                       3 GAAGTCGAGGCTTTCAGCA 21
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89.5%;
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TELEFAX: (202) 371-2540
INFORMATION FOR SEQ ID NO: 22.
SEQUENCE CHARACTERISTICS:
                                                                                                                                                           68.7%;
89.5%;
                                                                                                                                                             Query Match 68.7
Best Local Similarity 89.5
Matches 17; Conservative
STRANDEDNESS: both
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Query Match
Best Local Similarity
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                     TOPOLOGY: both FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                               US-09-172-019-22/c
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US-09-172-019-22
                                                                   ; NAME/KEY:
; LOCATION:
US-09-166-093-22
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          APPLICANT: Whitlow, Marc
APPLICANT: Wood, James F.
APPLICANT: Hardman, Karl
APPLICANT: Bird, Robert
APPLICANT: Filpula, David
APPLICANT: Filpula, David
APPLICANT: Filpula, David
APPLICANT: Rollence, Michelle
TITLE OF INVENTION: Multivalent Antigen-Binding Proteins
TUMBER OF SEQUENCES: 23
CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                    2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 E: Sterne, Kessler, Goldstein & Fox P.L.L.C.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      STATE: D.C.
COUNTRY: U.S.A.
ZIP: 20005
ZIP: 20005
COMPUTER READBLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM FC Compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/09/166,093
FLING APPLICATION:
PRIOR APPLICATION:
PRIOR APPLICATION NUMBER: US 08/392,338
FILING DATE: 2-FEB-195
FILING DATE: 2-FEB-195
FILING DATE: 2-FOW-1992
PRIOR APPLICATION NUMBER: US 07/989,846
FILING DATE: 2-NOV-1992
PRIOR APPLICATION NUMBER: US 07/989,846
FILING DATE: 2-NOV-1992
PRIOR APPLICATION NUMBER: US 07/989,846
FILING DATE: 2-NOV-1991
APPLICATION NUMBER: US 07/989,846
FILING DATE: 2-NOV-1991
APPLICATION NUMBER: US 07/796,936
FILING DATE: Z-NOV-1991
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     NAME: Goldstein, Jorge A.
REGISTRATION NUMBER: 29,021
REFERENCE/DOCKET NUMBER: 0977.003000B
TELECOMMUNICATION INFORMATION:
TELEPHONE: (202) 371-2600
TELEFAX: (202) 371-2540
INFORMATION FOR SEQ ID NO: 22:
SEQUENCE CHARACTERISTICS:
LENGTH: 738 base pairs
TYPE: nucleic acid
REFERENCE/DOCKET NUMBER: 0977.003000C
TELECOMMUNICATION INFORMATION:
TELEPHONE: (202) 371-2540
TELEFAX: (202) 371-2540
INFORMATION FOR SEQ ID NO: 22:
SEQUENCE CHARACTERISTICS:
LENGTH: 738 base pairs
TYPE: nucleic acid
STRANDEDNESS: both
                                                                                                                                                                                                                                                                                                                                                                                                    0; Mismatches
                                                                                                                                                                                                                                                                                                                                                 Score 15.8;
Pred. No. 44
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Sequence 22, Application US/09166093 Patent No. 6027725
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             350 GAAGTAGAGCCTTTCAGCA 332
                                                                                                                                                                                                                                                                                                                                                                                                                                                3 GAAGTCGAGGCTTTCAGCA 21
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Best Local Similarity 89.5%;
Matches 17; Conservative (
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           CITY: Washington STATE: D.C.
                                                                                                                                                                                                                                                          ) NAME/KEY: CDS
; LOCATION: 1..726
US-09-166-750-22
                                                                                                                                                                                                              TOPOLOGY: both FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  RESULT 8
US-09-166-093-22/c
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Sequence 13, Application PC/TUS9311138
GENERAL INFORMATION:
APPLICANT: BAZOA, Inc.
TITLE OF INVENTION: Linker For Linked Fusion Polypeptides
NUMBER OF SEQUENCES: 14
NUMBER OF SEQUENCES: 18
ADDRESSEE: Sterne, Kessler, Goldstein & Fox
STREET: 1100 New York Avenue, N.W.
CITY: Washington
STATE: D.C.
                                                                                                                                                                                                                                                                                                 MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.25
CURRENT APPLICATION DARA:
APPLICATION NUMBER: PCT/US93/11138
FILING DATE: Herewith
                                                                                                                                                                                                                                                                                                                                                                                                                                            PRIOR APPLICATION:
PRIOR APPLICATION DATA:
PRIOR APPLICATION DATA:
APPLICATION NUMBER:
TILING DATE: 20-NOV-1992
PRIOR APPLICATION NUMBER: 08 06/002,845
FILING DATE: 15-JAN-1993
ATTORNEY/AGBNT INFORMATION:
NAME: GOLGSLEEI, JORGE A.
REGISTRATION NUMBER: 29,021
REFERENCE/DOCKET NUMBER: 29,021
REFERENCE/DOCKET NUMBER: 9977.2006604/JAG
TELECOMMUNICATION INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TELEPHONE: (202) 371-2600
TELEFAX: (202) 371-2540
INFORMATION FOR SEQ ID NO: 13:
SEQUENCE CHARACTERISTICS:
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89.5%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        : 738 base pairs
nucleic acid
EDNESS: both
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Query Match 68.7
Best Local Similarity 89.5
Matches 17; Conservative
                                                                                                                                                                                                                                                                                COMPUTER READABLE FORM:
                                                                                                                                                                                                                     STATE: D.C. COUNTRY: U.S.A. ZIP: 20005-3934
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               STRANDEDNESS:
TOPOLOGY: bot
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                                                                                                                                                                                                                                                                                  APPLICANT: Hardman, Karl
APPLICANT: Bird, Robert
APPLICANT: Filpula, David
APPLICANT: Rollence, Michelle
TITLE OF INVENTION: Multivalent Antigen-Binding Proteins
NUMBER OF SEQUENCES: 23
        Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                          3: Sterne, Kessler, Goldstein & Fox P.L.L.C.
1100 New York Avenue, NW
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       COUNTKI: ....

ZIF: 20005

COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/09/166,094
FTLING DATE: Herewith
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Score 15.8; DE
Pred. No. 44;
0; Mismatches
  0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           FILING DATE: Herewith CLASSIFICATION DATA: PRIOR APPLICATION DATA: APPLICATION DATA: APPLICATION NUMBER: US 08/392,338 FILING DATE: 22-FEB-1995 PRIOR APPLICATION NUMBER: US 07/989,846 FILING DATE: 20-NOV-1992 PRIOR APPLICATION DATA: APPLICATION NUMBER: US 07/796,936 FILING DATE: 25-NOV-1991 ATTORNEY/AGENT INFORMATION: NAME: Goldstein, Jorge A. REGISTRATION NUMBER: 29,021 REFERENCE/DOCKET NUMBER: 0977.003000A TELECOMMUNICATION: TELECOMMUNICATION:
                                                                                                                                                                                 Sequence 22, Application US/09166094
Patent No. 6121424
GENERAL INFORMATION:
APPLICANT: Whitlow, Marc
                                                               350 GAAGTAGAGCCTTTCAGCA 332
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          350 GAAGTAGAGCCTTTCAGCA 332
                                         3 GAAGTCGAGGCTTTCAGCA 21
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TELEPHONE: (202) 371-2600
TELEFAX: (202) 371-2540
INFORMATION FOR SEQ ID NO: 22:
SEQUENCE CHARACTERISTICS:
LENGTH: 738 base pairs
TYPE: nucleic acid
STRANDEDNESS: both
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 3 GAAGTCGAGGCTTTCAGCA 21
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Best Local Similarity 89.5%;
Matches 17; Conservative
                                                                                                                                                                                                                                                 Whitlow, Marc
Wood, James F.
Hardman, Karl
17; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                    CORRESPONDENCE ADDRESS:
ADDRESSEE: Sterne, K
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CITY: Washington
                                                                                                                                                         US-09-166-094-22/C
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ; LOCATION:
US-09-166-094-22
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                                                                                                                                                                                                                                                                                                                                                                                                                                                           STREET:
Matches
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Gaps
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                                                                                                                              Sequence 12, Application US/08392338A

Sequence 12, Application US/08392338A

Patent No. 5869620

GENERAL INPORMATION:
APPLICANT: Whitlow, Marc
APPLICANT: Wood, James F.
APPLICANT: Bird, NEObert
APPLICANT: Filpula, David
TITLE OF INTENTION: Multivalent Antigen-Binding Proteins
NUMBER OF SEQUENCES:
ADDRESSEE: Sterne, Kessler, Goldstein & Fox P.L.L.C.
STREET: 1100 New York Avenue, NW
STREET: D.C.
STREET: D.C.
   Length 738;
                                       Indels
Score 15.8; DB 5;
Pred. No. 44;
                                     Mismatches
                                                                                        350 GAAGTAGAGCCTTTCAGCA 332
                                                                     3 GAAGTCGAGGCTTTCAGCA 21
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    COUNTRY: U.S.A.
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RESULT

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APPLICATION NUMBER: US 08/392,338
FILING DATE: 22-FEB-1995
FRIONG APPLICATION DATA:
APPLICATION NUMBER: US 07/989,846
FILING DATE: 20-NOV-1992
PRIOR APPLICATION DATA:
APPLICATION DATA:
APPLICATION DATA:
APPLICATION NUMBER: US 07/796,936
FILING DATE: 25-NOV-1991
ATTORNEY/AGENT INFORMATION:
NAME: Goldstein, Jorge A.
REGISTRATION NUMBER: 29,021
REGISTRATION NUMBER: 29,021
RECISTRATION NUMBER: 29,021
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Score 15.8;
Pred. No. 44
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APPLICATION NUMBER: US 08/392,338
FILING DATE: 22-FEB-1995
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 07/989,846
FILING DATE: 20-NOV-1992
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         us 07/796,936
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Sequence 12, Application US/09166093
Patent No. 6027725
GENERAL INFORMATION:
APPLICANT: Whitlow, Marc
APPLICANT: Wood, James F.
APPLICANT: Hardman, Karl
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          3 GAAGTCGAGGCTTTCAGCA 21
                                                                                                                                                                                                                                                                                         TELEPHONE: (202) 371-260
TELEFAX: (202) 371-2540
INFORMATION FOR SEQ ID NO: 12:
SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Query Match
Best Local Similarity 89.5'
Matches 17; Conservative
                                                                                                                                                                                                                                                                                                                                                                                    LENGTH: 744 base pairs
TYPE: nucleic acid
STRANDEDNESS: both
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             FILING DATE: 20-NOV-1
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 0
                                                                                                                                                                                                                                                                                                                                                                                                                                                      TOPOLOGY: both FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CLASSIFICATION:
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US-09-166-093-12/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ; NAME/KEY:
; LOCATION:
US-09-166-750-12
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APPLICANT: Wood, James F.
APPLICANT: Hardman, Karl
APPLICANT: Hardman, Karl
APPLICANT: Bird, Robert
APPLICANT: Bird, David
APPLICANT: Filpula, David
APPLICANT: Filpula, David
APPLICANT: Rollence, Michelle
TITLE OF INVENTION: Methods for Producing Multivalent Antigen-Binding
TITLE OF INVENTION: Proteins
NUMBER OF SEQUENCES: 23
CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ö
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                                                                             OPERATING SYSTEM: PC-LUDS/MS-LUDS
SOFTWARE: Patentin Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/392,338A
FILLING DATE: 22-FEB-1995
CLASSIFICATION: 435
PRIOR APPLICATION NUMBER: US 07/989,846
FILLING DATE: 20-NOV-1992
PRIOR APPLICATION NUMBER: US 07/796,936
FILLING DATE: 25-NOV-1991
ATTORNEY/AGENT INFORMATION:
NAME: Goldstein, Jorge A.
REGISTRATION NUMBER: 0977.0030007
TELECOMMUNICATION INFORMATION:
TELECOMMUNICATION INFORMATION:
TELECOMMUNICATION INFORMATION:
TELECOMMUNICATION INFORMATION:
TELECOMMUNICATION INFORMATION:
TELECOMMUNICATION OF SEQ ID NO: 12:
SEQUIBNE CHARACTERISTICS:
TENTMUNICATION TO SEG ID NO: 12:
SEQUIBNE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     PatentIn Release #1.0, Version #1.25
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           STREET: 1100 New York Avenue, NW CITY: Washington STATE: D.C. COUNTRY: U.S.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
                       MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC COMPATIBLE
OPERATING SYSTEM: PC-DOS/MS-DOS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Sequence 12, Application US/09166750 Patent No. 6025165 GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     350 GAAGTAGAGCCTTTCAGCA 332
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89.5%;
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Best Local Similarity 89.59
Matches 17; Conservative
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APPLICATION NUMBER: US
FILING DATE: Herewith
CLASSIFICATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               LENGTH: 744 base pairs
TYPE: nucleic acid
STRANDEDNESS: both
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy of
       COMPUTER READABLE FORM:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             NAME/KEY: CDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     RESULT 13
US-09-166-750-12/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ; LOCATION:
US-08-392-338A-12
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Gaps
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DB 3; Length 744;
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APPLICANT: Wood, James F.
APPLICANT: Hardman, Karl
APPLICANT: Blind, Robert
APPLICANT: Filplid, David
APPLICANT: Rollence, Michelle
ADDRESSEE: Sterne, Kessler, Goldstein & Fox P.L.L.C.
                                                             2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                E: Sterne, Kessler, Goldstein & Fox P.L.L.C. 1100 New York Avenue, NW
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CITY: Mashington
STATE: D.C.
COUNTR: U.S.A.
ZIP: 20005
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: PREC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/09/166,093
FILING DATE: Herewith
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APPLICANT: Bird, Robert
APPLICANT: Bird, Robert
APPLICANT: Elipula, David
TITLE OF INVENTION: Nucleic Acid Molecules Encoding Single-Chain
TITLE OF INVENTION: Antigen-Binding Proteins (As Amended)
NUMBER OF SEQUENCES: 23
CORRESPONDENCE ADDRESS:
ADDRESSEE: Sterne, Kessler, Goldstein & Fox P.L.L.C.
STREET: 1100 New York Avenue, NW
CITY: Mashington
STATE: D.C.
COUNTRY: U.S.A.
ZIP: 20005
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 DB 3; Length 744;
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FILING DATE: 25-NOV-1991
ATORNEY/AGENT INFORMATION:
NAME: GOLdStell., JORGE A.
REGISTRATION NUMBER: 29,021
REFERENCE/DOCKET NUMBER: 0977.003000B
TELECOMMUNICATION INFORMATION:
TELEPHONE: (202) 371-2600
TELEPAX: (202) 371-2600
TELEPAX: (202) 371-2540
INFORMATION FOR SEQ ID NO: 12:
SEQUENCE CHARACTERISTICS:
LENGTH: 744 base pairs
TYPE: nucleic acid
STRANDEDNESS: both
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Query Match 68.7%; Score 15.8; Dest Local Similarity 89.5%; Pred. No. 44; Matches 17; Conservative 0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           NAME: Goldstein, Jorge A.
REGISTRATION NUMBER: 29,021
REFERENCE/DOCKET NUMBER: 0977.003000D
TELECOMMUNICATION INFORMATION:
TELEPHONE: (202) 371-2600
TELEFAX: (202) 371-2540
INFORMATION FOR SEQ ID NO: 12:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/09/172,019
FILING DATE: Herewith
CLASSIFICATION:
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/392,338
FILING DATE: 22-FEB-1995
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 07/989,846
FILING DATE: 20-NOV-1992
PRIOR APPLICATION NUMBER: US 07/96,936
FILING DATE: 25-NOV-1991
APPLICATION NUMBER: US 07/796,936
FILING DATE: 25-NOV-1991
ATTORNEY/AGENT INFORMATION:
NAME: Goldstein, Jorge A
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 COMPUTER READBALE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Sequence 12, Application US/09172019; Patent No. 6103889; GENERAL INFORMATION: APPLICANT: Whitlow, Marc APPLICANT: Hardman, Karl
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               350 GAAGTAGAGCCTTTCAGCA 332
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  3 GAAGTCGAGGCTTTCAGCA 21
                                                                                                                                                                                                                                                                                                                                      TOPOLOGY: both
                                                                                                                                                                                                                                                                                                                                                                                      ; NAME/KEY:
; LOCATION:
US-09-166-093-12
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GenCore version 5.1.6
Copyright (c) 1993 - 2003 Compugen Ltd.
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OM nucleic - nucleic search, using sw model

June 12, 2003, 01:27:04; Search time 134.381 Seconds Run on:

(without alignments) 239.539 Million cell updates/sec

US-09-674-195C-17 23

Title: Perfect score:

1 degaagtegaggettteageatg 23 Sequence:

IDENTITY_NUC Gapop 10.0 , Gapext 1.0 Scoring table:

870385 seqs, 699768693 residues Searched:

1740770 Total number of hits satisfying chosen parameters:

Minimum DB seq length: 0 Maximum DB seq length: 200000000

Post-processing: Minimum Match 0% Maximum Match 100% Listing first 45 summaries

Database :

Published_Applications_NA:*

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(cgn2_6/ptodata/2/pubpna/US06_NEW_PUB.seq:*

(cgn2_6/ptodata/2/pubpna/US06_NEW_PUB.seq:*

(cgn2_6/ptodata/2/pubpna/US08_NEW_PUB.seq:*

(cgn2_6/ptodata/2/pubpna/US08_NEW_PUB.seq:*

(cgn2_6/ptodata/2/pubpna/US08_PUBCOMB.seq:*

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Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

& Query
Match Length DB
74.8 1691139
73.0 454
71.3 891
71.3 1097
68.7 310
68.7 375
68.7 397
68.7 550
68.7 723
68.7 723
68.7 758
68.7 758
_
68.7 818
68.7 933

Sequence 271, Appl Sequence 19, Appl Sequence 552, Appl Sequence 139, Appl Sequence 139, Appl Sequence 25, Appl Sequence 1, Appl Sequence 28, Appl Sequence 28, Appl Sequence 88, Appl Sequence 86, Appl Sequence 862, Appl Sequence 862, Appl Sequence 862, Appl Sequence 602, Appl
10 US-09-770-445-271 9 US-10-165-603-19 9 US-09-952-2130-6 10 US-09-954-456-552 10 US-09-984-156-512 10 US-09-880-107-1612 10 US-09-884-139 10 US-09-844-139 10 US-09-846-807-1 10 US-09-946-807-1 10 US-09-946-807-1 10 US-09-795-668-1 110 US-09-795-668-1 110 US-09-795-68-1 110 US-09-795-68-1 110 US-09-795-68-1 110 US-09-795-68-1 110 US-09-795-68-1 110 US-09-910-943-408 9 US-10-943-408 9 US-09-925-299-98 10 US-09-935-298-98 10 US-09-764-860-867
981 1275 17755 2036 2036 2036 2036 1579 34094 1503841 1503841 1503841 1503841 1503841 1186 1186 1186 1186 1186 2476 8272 8272 8272 8272
688.7.7 678.8.7.6 67.0.0 67.0
8.6.8.6.8.6.8.6.8.6.8.6.8.6.8.6.8.6.8.6
0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0

ALIGNMENTS

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Sequence 3226, Application US/09864761
Patent No. US20020048763a1
GENERAL INFORMATION:
APPLICANT: Penn, Sharron G.
APPLICANT: Hanzel, David R.
APPLICANT: Hanzel, David R.
APPLICANT: Chen, Wensheng
TITLE OF INVENTION: HUMAN GENOME-DERIVED SINGLE EXON NUCLEIC ACID PROBES USEFUL FO
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Length 1691139;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    DB 9;
                                                                              APPLICANT: Gretarsdottir, Solveig
APPLICANT: Jonsdottir, Sif
APPLICANT: Jonsdottir, Sigridur Th.
TTLE OF INVENTION: HUMAN STROKE GENE
FILE REPERENCE: 2345.2010-003
CURRENT APPLICATION NUMBER: US/10/067,514
CURRENT FILING DATE: 2002-02-04
PRIOR APPLICATION NUMBER: US 09/811/352
PRIOR APPLICATION NUMBER: US 09/811/352
NUMBER OF SEQ ID NOS: 84
NUMBER OF SEQ ID NOS: 84
SOFTWARE: FASTEEQ for Windows Version 4.0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Pred. No. 37; 0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  74.8%; Score 17.2;
86.4%; Pred. No. 37
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                2 CGAAGTCGAGGCTTTCAGCATG 23
                    Sequence 1, Application US/10067514 Publication No. US20030054531A1 GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                               Query Match
Best Local Similarity 86.4<sup>1</sup>
Matches 19; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     RESULT : 2
US-09-864-761-3226/C
                                                                                                                                                                                                                                                                                                                                                                        TYPE: DNA
ORGANISM: Human
                                                                                                                                                                                                                                                                                                                               SEQ ID NO 1
LENGTH: 1691139
US-10-067-514-1
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APPLICANT: OUGLISTIC, MAIC
TITLE OF INVENTION: Species-Specific, Genus-Specific and Universal DNA
TITLE OF INVENTION: Species-Specific, Genus-Specific and Universal DNA
TITLE OF INVENTION: Probes and Amplification Primers to Rapidly Detect
TITLE OF INVENTION: Associated Antibiotic Resistance Genes from
FILE REFERENCE: 12287.29
CURRENT APPLICATION NUMBER: US/09/989,643
CURRENT FILING DATE: 2001-11-20
PRIOR APPLICATION NUMBER: EARLIER APPLICATION NUMBER: 09/297,539
PRIOR FILING DATE: BARLIER FILING DATE: 1999-05-09
PRIOR FILING DATE: BARLIER FILING DATE: 1999-05-09
PRIOR FILING DATE: BARLIER FILING DATE: 1996-05-09
PRIOR FILING DATE: BARLIER FILING DATE: 1996-01-04
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        DB 9; Length 891;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                General involvantion;
General involvantion;
APPLICANT: Berka, Randy M.
APPLICANT: Clausen, 1b Groth
TITLE OF INVENTION: Methods For Monitoring Multiple Gene
TITLE OF INVENTION: Expression
FILE REFERENCE: 10085.500-US
CURRENT APPLICATION NUMBER: 05/09/974,300
CURRENT FILING DATE: 2001-10-05
PRIOR FILING DATE: 2000-10-06
PRIOR FILING DATE: 2001-03-27
NUMBER OF SEQ ID NOS: 8481
SOFTWARE: FastSEQ for Windows Version 4.0
SEQ ID NO 179
LENGTH: 1097
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Mismatches
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71.3%; Score 16.4;
Best Local Similarity 81.8%; Pred. No. 57
Matches 18; Conservative 1; Mismatche
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llarity 81.8%; Pred. No. 56
Conservative 1; Mismatche
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Patent No. US20020146721A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Sequence 665, Application US/09878574
Patent No. US20020110548al
GENERAL INFORMATION:
APPLICANT: Byrum, Joseph R.
APPLICANT: La Rosa, Thomas J.
APPLICANT: Thompson, Michael D.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1 DCGAAGTCGAGGCTTTCAGCAT 22
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ; ORGANISM: Fibrobacter succinogenes US-09-989-643-155
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ; ORGANISM: Bacillus licheniformis US-09-974-300-179
                                                                                                                                                                                                                                                                                                                                                                                                                     NUMBER OF SEQ ID NOS: 174
SOFTWARE: Patentin Ver. 2.1
SEQ ID NO 155
LENGTH: 891
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Best Local Similarity
Matches 18; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      US-09-974-300-179
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TYPE: DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TYPE: DNA
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INFORMATION: EXPRESSED IN BONE MARROW, SIGNAL =
INFORMATION: EXPRESSED IN FETAL LIVER, SIGNAL =
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                OTHER INFORMATION: MAP TO ALOSO331.11
OTHER INFORMATION: EXPRESSED IN ADULT LIVER, SIGNAL - OTHER INFORMATION: EXPRESSED IN BARIN, SIGNAL - 1.5
OTHER INFORMATION: EXPRESSED IN PLACENTA, SIGNAL - 1.2
OTHER INFORMATION: EXPRESSED IN BT474, SIGNAL - 1.2
OTHER INFORMATION: EXPRESSED IN HEARY SIGNAL - 1.2
OTHER INFORMATION: EXPRESSED IN HEARY SIGNAL - 1.3
OTHER INFORMATION: EXPRESSED IN LUNG, SIGNAL - 1.3
OTHER INFORMATION: EXPRESSED IN BUILDO, SIGNAL - 0.99
OTHER INFORMATION: EXPRESSED IN BONE MARROW, SIGNAL - 0.99
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                SOFTWARE: Annomax Sequence Listing Engine vers. 1.1
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Best Local Similarity 90.0%; Pred. No. 33;
Matches 18; Conservative 0; Mismatches
                   PRIOR APPLICATION NUMBER: US 60/180,312
PRIOR PPLICATION NUMBER: US 60/180,312
PRIOR PPLICATION NUMBER: US 60/207,456
PRIOR PLICATION NUMBER: US 60/207,456
PRIOR PLILING DATE: 2000-05-26
PRIOR PLILING DATE: 2000-09-03
PRIOR PLILING DATE: 2000-09-03
PRIOR PLILING DATE: 2000-09-37
PRIOR PLILING DATE: 2001-01-30
PRIOR PLILING DATE: 2000-09-31
PRIOR PELLING DATE: 2000-09-31
PRIOR PELLING DATE: 2000-09-31
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US-09-989-643-155/c
US-09-989-643-155/c
; Sequence 155, Application US/09989643
; Publication No. US20030049636A1
; GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        201 AAGTAGAGGCTTTCTGCATG 182
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ORGANISM: Homo sapiens FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               NUMBER OF SEQ ID NOS
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; OTHER INFORMAT US-09-864-761-3226

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SEQ ID NO 3226 LENGTH: 454

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; ORGANISM: Homo sapien
US-09-867-701-8410
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        SEQ ID NO 838
LENGTH: 550
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TYPE: DNA
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TITLE OF INVENTION: Nucleic Acid Molecules and Other Molecules Associated with TITLE OF INVENTION: Plants
FILE REPERENCE: 38-21(15.401)B
CURRENT APPLICATION NUMBER: 105/09/878,574
CURRENT FILING DATE: 2001-12-21
PRIOR APPLICATION NUMBER: 09/333,535
PRIOR FILING DATE: 1999-06-14
NUMBER OF SEQ ID NOS: 15775
SEQ ID NO 665
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   GENERAL INFORMATION:
APPLICANT: Byrum, Joseph R.
APPLICANT: Byrum, Joseph R.
APPLICANT: Thomas J.
APPLICANT: Thompson, Michael D.
TITLE OF INVENTION: Plants
FILE REFERENCE: 38-21 (15401)B
CURRENT APPLICATION NUMBER: US/09/878,574
CURRENT FILING DATE: 2001-12-21
PRIOR APPLICATION NUMBER: 09/333,535
PRIOR FILING DATE: 1999-06-14
NUMBER OF SEQ ID NOS: 15775
SEQ ID NOS: 15775
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Sequence 8410, Application US/09867701

Sequence 8410, Application US/09867701

Sequence 8410, Application US/09867701

Sequence 8410, Application US/09867701

APPLICANT: Aglate, Paul A.

APPLICANT: Application Subject

TITLE OF INVENTION: COMPOSITIONS AND METHODS FOR THE THERAPY

TITLE OF INVENTION: COMPOSITIONS AND METHODS FOR THE THERAPY

TITLE OF INVENTION: COMPOSITIONS AND METHODS FOR THE THERAPY

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TITLE OF INVENTIONS AND MET
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Ouery Match 68.7%; Score 15.8; DB 10; Best Local Similarity 78.3%; Pred. No. 1.1e+02; Matches 18; Conservative 1; Mismatches 4;
                                                                                                                                                                                                                                                                                                                                                                                                      ; TYPE: DNA
; ORGANISM: Glycine max
; OTHER INFORMATION: Clone ID: LIB3028-047-Q1-B1-H11
US-09-878-574-665
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ; TYPE: DNA
; ORGANISM: Glycine max
; OTHER INFORMATION: Clone ID: LIB3028-008-Q1-B1-D10
US-09-878-574-3603
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 263 TCCAAGTCAAGGTTTTAAGCAIG 285
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Patent No. US20020110548A1
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Sequence 838, Application US/0991936
| Publication No. US20030073827A1
| GENERAL INFORMATION:
| APPLICANT: Brandt, Kevin S.
| APPLICANT: Gaines, Patrick J.
| APPLICANT: Gaines, Patrick J.
| APPLICANT: Stinchcomb, Dan T.
| APPLICANT: Stinchcomb, Dan T.
| APPLICANT: Wisnewski, Nancy
| TITLE OF INVENTION: FLEA HEAD, NERVE CORD, HINDGUT AND USES THEREOF
| TITLE OF INVENTION: FLEA HEAD, NERVE CORD, HINDGUT AND USES THEREOF
| TITLE OF INVENTION: BOUGHER: US/09/991,936
| TITLE OF INVENTION NUMBER: US/09/991,936
| CURRENT APPLICATION NUMBER: US/09/543,668
| PRIOR FILING DATE: 2000-04-07
| PRIOR FILING DATE: 1999-04-07
| PRIOR FILING DATE: 1999-04-09
| NUMBER OF SEQ ID NOS: 1959
| SOFTWARE: PATENTIN VET. 2.1
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                                                                   Gaps
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FILPULA, DAVID R.
LEE, LIHSYNG S.

TITLE OF INVENTION: POLYPEPTIDES
POLYPEPTIDES
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Query Match
68.7%; Score 15.8; DB 10; Length 397;
Best Local Similarity 78.3%; Pred. No. 1.1e+02;
Matches 18; Conservative 1; Mismatches 4; Indels 0
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Length 550;
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OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Query Match 68.7%; Score 15.8; DB 9; Best Local Similarity 89.5%; Pred. No. 1.1e+02; Matches 17; Conservative 0; Mismatches 2;
                                                                                                                                                               282 TCAAAGTAGTGGCTTTCTGCATG 304
                                                                                                          1 DCGAAGTCGAGGCTTTCAGCATG 23
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Sequence 5, Application US/09791578
Patent No. US20020061307A1
GENERAL INFORMATION:
APPLICANT: WHITLOW, MARC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       3 GAAGTCGAGGCTTTCAGCA 21
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ; ORGANISM: Ctenocephalides fells
US-09-991-936-838
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ZIP: 20005
COMPUTER READABLE FORM:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     NUMBER OF SEQUENCES:
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TITLE OF INVENTION: SINGLE-CHAIN ANTIGEN-BINDING PROTEINS
CAPABLE OF GLYCOSYLATION, PRODUCTION AND USES THEREOF
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         STREET: 1100 NEW YORK AVE., NW, SUITE 600
CITY: WASHINGTON
STATE: DC
COUNTRY: USA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                COMPUTER: IBM PC compatible
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PATENTIN Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/09/956,086
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     DB 10;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Score 15.8; DB 10
Pred. No. 1.2e+02;
                                                                                        ATTORNEY/AGENT INFORMATION:
NAME: JORGE A. GOLDSTEIN
REGISTRATION NUMBER: 29,021
REFERENCE/DOCKET NUMBER: 0977.1840002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  APPLICATION NUMBER: 09/069,821
FILING DATE: CUNKNOWN>
APPLICATION NUMBER: US 60/063,074
FILING DATE: 27-0CT-1997
APPLICATION NUMBER: US 60/050,472
FILING DATE: 23-JUN-1997
APPLICATION NUMBER: US 60/044,449
FILING DATE: 30-APR-1997
ATTORNEY/AGENT INNORMATION:
NAME: KIM, JUDITH U.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               0; Mismatches
                                            APPLICATION NUMBER: US 60/067,341 FILING DATE: 02-DEC-1997
                                                                                                                                                                                                                                                                                                                                                                                                                              LOCATION: 1..723
SEQUENCE DESCRIPTION: SEQ ID NO: 5:
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Patent No. US20020155498A1
GENERAL INFORMATION:
APPLICANT: FILPULA, DAVID
SHORD, ROBERT
WHITLOW, MARC
LEE, LIHSYNG S.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 FILING DATE: 20-Sep-2001 CLASSIFICATION: <Unknown>
                                                                                                                                                                             TELECOMMUNICATION INFORMATION:
TELEPHONE: 202-371-2600
TELEFAX: 202-371-2540
INFORMATION FOR SEQ ID NO: 5:
SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     350 GAAGTAGAGCCTTTCAGCA 332
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         3 GAAGTCGAGGCTTTCAGCA 21
                                                                                                                                                                                                                                                                                           LENGTH: 723 base pairs
TYPE: nucleic acid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Query Match 68.7%;
Best Local Similarity 89.5%;
Matches 17; Conservative (
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ADDRESSEE: STERNE,
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           NUMBER OF SECUENCES: 33
                                                                                                                                                                                                                                                                                                                                                                                                       NAME/KEY: CDS
                                                                                                                                                                                                                                                                                                                                                               TOPOLOGY: both
                                                                                                                                                                                                                                                                                                                                            STRANDEDNESS
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Length 723;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ADDRESSEE: STERNE, KESSLER, GOLDSTEIN & FOX P.L.L.C.
STREET: 1100 NEW YORK AVENUE, SUITE 600
CITY: WASHINGTON
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MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC Compatible
COMPUTER: TBM PC Compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
RELIGATION NUMBER: US/09/791,540
FILING DATE: 26-Feb-2001
CLASSIFICATION: <UNKNOWN>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Score 15.8; DB 10;
Pred. No. 1.2e+02;
                                                                                                                                                                                                                                                                      ATTORNEY/AGENT INFORMATION:
NAME: JORGE A. GOLDSTEIN
REGISTRATION NUMBER: 29,021
REFERENCE/DOCKET NUMBER: 0977.1840002
TELECOMMUNICATION INFORMATION:
TELEPHONE: 202-371-2600
                                                               PRIOR APPLICATION DATA:

APPLICATION NUMBER: 09/069,842
FILING DATE: CUTAOWNON
APPLICATION NUMBER: US 60/050,472
FILING DATE: 23-UN-1997
APPLICATION NUMBER: US 60/063,074
FILING DATE: 27-OCT-1997
APPLICATION NUMBER: US 60/067,341
FILING DATE: 02-DEC-1997
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APPLICATION NUMBER: 09/069,842
FILING DATE: 1998-04-30
APPLICATION NUMBER: US 60/050,472
FILING DATE: 23-UUN-1997
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 0; Mismatches
APPLICATION NUMBER: US/09/791,578 FILING DATE: 26-Feb-2001 CLASSIFICATION: <Unknown>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ; SEQUENCE DESCRIPTION: SEQ ID NO: 5: US-09-791-578-5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Sequence 5, Application US/09791540
Patent No. US20020098192A1
GENERAL INFORMATION:
HITLOW, MARC
SHORR, ROBER G.L.
FILPULA, DAVID R.
LEE, LIHSYNG S.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         3 GAAGTCGAGGCTTTCAGCA 21
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                                                                                                                                                                                                                                                                                                                                                                                                                                                     SEQUENCE CHARACTERISTICS
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Best Local Similarity 89.5%;
Matches 17; Conservative
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CORRESPONDENCE ADDRESS:
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Length 723; Indels

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Sequence 1, Application US/09985442
Patent No. US20020156248A1
GENERAL INFORMATION:
APPLICANT: Filpula, David R.
APPLICANT: Wang, Maoliang
APPLICANT: Whithow, Marc D.
TITLE OF INVENTION: No. US20020156248A1el Method for Targeted Delivery of Nucleic
                                                                                                                                                                                                                                                                                 Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Gaps
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TITLE OF INVENTION: POLYALKYLENE OXIDE-MODIFIED SINGLE CHAIN
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                                                                                                                                                                                                                                     Length 758;
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Pred. No. 1.2e+02;
0; Mismatches 2;
                                                                                                                                                                                                                                     Score 15.8; DB 9;
Pred. No. 1.2e+02;
                                                                                                                                                                                                                                  Query Match 68.7%; Score 15.8; D
Best Local Similarity 89.5%; Pred. No. 1.2e
Matches 17; Conservative 0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CURRENT APPLICATION NUMBER: US/09/985,442
CURRENT FILING DATE: 2001-11-02
PRIOR APPLICATION NUMBER: 09/420,592
PRIOR FILING DATE: 1999-10-19
PRIOR FILING DATE: 1998-10-20
NUMBER OF SEQ ID NOS: 13
SOFTWARE: PATENTIN VET. 2.1
                                                                                                                            ; LOCATION: 1..747
; SEQUENCE DESCRIPTION: SEQ ID NO: 1:
US-09-956-087-1
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SHORK, ROBERT G.L.
FILPULA, DAVID R.
LEE, LIHSYNG S.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Sequence 3, Application US/09791578
Patent No. US20020061307A1
GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                350 GAAGTAGAGCCTTTCAGCA 332
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                                                                                                                                                                                                                                                                                                                       3 GAAGTCGAGGCTTTCAGCA 21
LENGTH: 758 base pairs
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TYPE: DNA ORGANISM: Artificial Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Query Match 68.7%;
Best Local Similarity 89.5%;
Matches 17; Conservative
                      TYPE: nucleic acid
STRANDEDNESS: both
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       NUMBER OF SEQUENCES: 6
CORRESPONDENCE ADDRESS:
                                                            TOPOLOGY: both
MOLECULE TYPE: CDNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ; NAME/KEY: CDS
; LOCATION: (1)..(771)
US-09-985-442-1
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                                                                                                          FEATURE
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LENGTH: 782
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SHORE, ROBERT
WHITLOW, MARC
LEE, LIHSYNG S.
TITLE OF INVENTION: SINGLE-CHAIN ANTIGEN-BINDING PROTEINS
CAPABLE OF GLYCOSYLATION, PRODUCTION AND USES THEREOF
                                                                                                                                                                                                                                                                                                                                                                                                            ö
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ADDRESSEE: STERNE, KESSLER, GOLDSTEIN & FOX P.L.L.C.
STREET: 1100 NEW YORK AVE., NW, SUITE 600
CITY: WASHINGTON
                                                                                                                                                                                                                                                                                                                                                                 Length 758;
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                                                                                                                                                                                                                                                                                                                                                           Score 15.8; DB 9;
Pred. No. 1.2e+02;
0; Mismatches 2;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  NAME: KIM, JUDITH U.
REGISTRATION NUMBER: 40,679
REFERENCE/DOCKET NUMBER: 0977.2280003
REFERENCE/DOCKET NUMBER: 0977.2280003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              APPLICATION DATA:
APPLICATION NUMBER: 09/069,821
FILING DATE: 1998-04-30
APPLICATION NUMBER: US 60/063,074
FILING DATE: 27-OCT-1997
APPLICATION NUMBER: US 60/050,472
FILING DATE: 23-JUN-1997
APPLICATION NUMBER: US 60/044,449
FILING DATE: 30-APR-1997
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FILING DATE: 20-Sep-2001
CLASSIFICATION: <UNKNOWN>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
                                                                                                                                                                                                                                                       LOCATION: 1.747
SEQUENCE DESCRIPTION: SEQ ID NO: 1: US-09-956-086-1
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                 TELECOMMUNICATION INFORMATION TELEPHONE: (202)371-2600
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Sequence 1, Application US/09956087
Patent No. US20020161201A1
GENERAL INFORMATION:
APPLICANT: FILPULA, DAVID
                                                       TELEFAX: (202)371-2540
INFORMATION FOR SEQ ID NO: 1:
SEQUENCE CHARACTERISTICS:
                                                                                                                     LENGTH: 758 base pairs
TYPE: nucleic acid
STRANDEDNESS: both
                                                                                                                                                                                                                                                                                                                                                                                                                                                 3 GAAGTCGAGGCTTTCAGCA 21
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ATTORNEY/AGENT INFORMATION:
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                                                                                                                                                                                                                                                                                                                                                           Query Match 68.7%;
Best Local Similarity 89.5%;
Matches 17; Conservative
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COMPUTER READABLE FORM:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   INFORMATION FOR SEQ ID NO: 1
                                                                                                                                                                                        TOPOLOGY: both
MOLECULE TYPE: CDNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                COUNTRY: USA
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US-09-956-087-1/c
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SOFTWARE: PatentIn Release #1.0, Version #1.30
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ATTORNEY/AGENT INFORMATION:
NAME: JORGE A. GOLDSTEIN
REGISTRATION NUMBER: 29,021
REFERENCE/DOCKET NUMBER: 0977.1840002
                                                                                                                                                                                       PRIOR APPLICATION DATA:

APPLICATION NUMBER: 09/069,842
FILING DATE: 1998-04-30
APPLICATION NUMBER: US 60/050,472
FILING DATE: 23-JUN-1997
APPLICATION NUMBER: US 60/063,074
FILING DATE: 27-OCT-1997
APPLICATION NUMBER: US 60/067,341
FILING DATE: 02-DEC-1997
                             CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/09/791,540
FILING DATE: 26-Feb-2001
CLASSIFICATION: <a href="checkbackground-color: color: co
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          SEQUENCE DESCRIPTION: SEQ ID NO: 3:
ds-09-791-540-3
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Job time: 144.666 secs
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TELEPHONE: 202-371-2600
TELEFAX: 202-371-2540
INFORMATION FOR SEQ ID NO: 3:
SEQUENCE CHARACTERISTICS:
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STRANDEDNESS: both
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FILPUTA, DAVID R.
LEE, LIHSYNG S.
TITLE OF INVENTION: POLYPEPTIDES
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Length 782;
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OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Version #1.30
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Pred. No. 1.2e+02;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 REGISTRATION NUMBER: 29,021
REFERENCE/DOCKET NUMBER: 0977.1840002
TELECOMMUNICATION INFORMATION:
                                                                                                                                                                                                                                                                                         CURRENT APPLICATION DATA:

CURRENT APPLICATION DATA:

APPLICATION NUMBER: US/09/791,578

FILING DATE: 26 Feb-2001

CLASSIFICATION CURROWN>

PRIOR APPLICATION DATA:

APPLICATION NUMBER: US/069,842

FILING DATE: 23-UN-1997

APPLICATION NUMBER: US 60/063,074

FILING DATE: 23-COT-1997

APPLICATION NUMBER: US 60/063,074

FILING DATE: 27-COT-1997

APPLICATION NUMBER: US 60/063,074

FILING DATE: 20-DEC-1997

APPLICATION NUMBER: US 60/063,074

FILING DATE: ADDEC-1997

ATTORNEY/AGENT INFORMATION:

NAME: JORGE AL GOLDSCELING
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SEQUENCE DESCRIPTION: SEQ ID NO: 3:
US-09-791-578-3
                                                   ZIP: 20005
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TELEPHONE: 202-371-2600
TELEPKX: 202-371-2540
INFORMATION FOR SEQ ID NO: 3:
SEQUENCE CHARACTERISTICS:
LENGTH: 782 base pairs
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Best Local Similarity 89.5%;
Matches 17; Conservative (
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COMPUTER READABLE FORM:
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Gaps

Length 782; Indels

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Coccidioides immitis.

Coccidioides immitis.

Coccidioides immitis

Eukaryota; Fungi, Ascomycota; Pezizomycotina; Eurotiomycetes; Onygenales; mitosporic Onygenales; Coccidioides.

I (bases 1 to 123)

Gardner, M.J. and Kirkland, T. Generation of ESTS from Coccidioides immitis spherule cDNA library Unpublished (2000)

Contact: Malcolm J. Gardner Department of Eukaryotic Genomics
The Institute for Genomic Research

9712 Medical Center Drive, Rockville, MD 20850, USA

Fax: 301 838 3519
                                                                    AW795430 D001189-R
BF2551715 EST418899
BF252074 EST4419356
BF252078 EST420141
BF252094 EST420141
BF252095 EST418258
BF251061 EST418258
BF25166 EST418219
W36400 mb75f10.r1
AW71051 D00369-R
AL435299 T3 end of
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AL435297 T7 end of
AL435003 T7 end of
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AL43127 T7 end of
AL431909 T7 end of
AL431990 T7 end of
AL312190 W9f071.r
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AN211197 V7H0531.r
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BF251708
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CNS077PT
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CNS07A19
CNS076RF
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AZ361913
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A1213893
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Location/Qualifiers
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JOURNAL
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BF251693 EST418877
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BF251964 EST419226
BF251967 EST419229
BF251561 EST418910
                                                                                                                                                  June 12, 2003, 00:35:54 ; Search time 844.228 Seconds (without alignments) 441.227 Million cell updates/sec
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            GenCore version 5.1.6
Copyright (c) 1993 - 2003 Compugen Ltd.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                    Total number of hits satisfying chosen parameters:
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Maximum Match 100%
Listing first 45 summaries
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                                                                                                      nucleic search, using sw model
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Gapop 10.0 , Gapext 1.0
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em_gss_other:*
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em_gss_pln:*
em_gss_vrt:*
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em_gss_rod:*
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Result ě

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577 bp mRNA linear EST 15-NOV-2001 EST419226 Coccidioides immitis spherule cDNA library Coccidioides immitis cDNA clone CIAAP15 5' sequence, mRNA sequence.
              Gardner, M.J. and Kirkland, T.
Generation of ESTs from Coccidioides immitis spherule cDNA library
Unpublished (2000)
Contact: Malcolm J. Gardner
Department of Eukaryotic Genomics
The Institute for Genomic Research
9712 Medical Center Drive, Rockville, MD 20850, USA
Thel: 301 838 3519
Fax: 301 838 0208
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Eukaryota; Fungl: Ascomycota; Pezizomycotina; Eurotiomycetes; Onygenales; mitosporic Onygenales; Coccidioides.

(a Casses 1 to 377)

Gardner, M.J. and Kirkland, T.
Generation of ESTs from Coccidioides immitis spherule cDNA library Onpublished (2000)

Contact: Malcolm J. Gardner
Department of Eukaryotic Genomics
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Tel: 301 838 3519

Fax: 301 838 0208
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/dev_stage="spherule"
/lab_host="SolR"
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/dev_stage="spherule"
/lab_host="SOLR"
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Abganism="Coccidioides immitis"

Ab.xref="taxon:5501"

/clone="CIAAM73"
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                0; Mismatches
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Pred. No. 95;
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/clone="CIAAP15"
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Location/Qualifiers
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Location/Qualifiers
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90.9%;
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   1 (bases 1 to 362)
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Best Local Similarity 90.9
Matches 20; Conservative
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( bases 1 to 351)

Gardner, M.J. and Kirkland, T.
Generation of ESTs from Coccidioides immitis spherule cDNA library nobblished (2000)
                                                                                                                                                                                                                                                                                                                    BF251693 351 bp mRNA linear EST 15-NOV-200 EST418877 Coccidioides immitis spherule cDNA library Coccidioides immitis cDNA clone CIAAK21 5' sequence, mRNA sequence.
/dev_stage="spherule"
/lab_host="SOLR"
/note="Vector: pBluescript SK(-); Site_1: EcoR1; Site_2:
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/dev_stage="spherule"
/lab_host="SOLR"
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Coccidioides immitis
Eukaryota; Fungi; Ascomycota; Pezizomycotina; Eurotiomycetes;
Onygenales; mitosporic Onygenales; Coccidioides.
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Department of Eukaryotic Genomics
The Institute for Genomic Research
712 Medical Center Drive, Rockville, MD 20850, USA
Tel: 301 838 9319
Fax: 301 838 0208
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/db_xref="taxon:5501"
/clone="CIAAK21"
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                                                                                                                        81.7%; Score 18.8; Dilarity 90.9%; Pred. No. 50; Conservative 0; Mismatches
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BF251811.1 GI:16931954
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Best Local Similarity 90.9%;
Matches 20; Conservative
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Matches 20; Conserv
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486 bp mRNA linear EST 01-MAY-2001
D00946-R Lambda Zap, Stratagene Blumeria graminis f. sp. hordel
CDNA clone D00948 similar to non-functional folate binding protein,
mRNA sequence.
                                                                                                                                                                                                                                                                                                                                                                                                                                                  Blumeria graminis f. sp. hordei.
Blumeria graminis f. sp. hordei
Blumeria graminis f. sp. hordei
Eukaryota; Fundi, Ascomycota; Pezizomycotina; Leotiomycetes;
Erysiphales; Erysiphaceae; Blumeria.
1 (bases 1 to 486)
Thomas, S.W., Rasmussen, S.W., Glaring, M.A., Rouster, J.A. and Oliver
                                       /db_xref="taxon:5501"
/clone="CIAAK57"
/clone="Lib="Coccidioides immitis spherule cDNA library"
/de_stage="spherule"
/lab_host="Solk"
/note="Vector:'pBluescript SK(-); Site_1: EcoR1; Site_2:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Gene identification in the fungal pathogen Blumeria graminis by expressed sequence tag analysis
Unpublished (2000)
Contact: Rasmussen, S.W.
Department of Yeast Genetics
Carlsberg Laboratory
10 Gl. Carlsbergy DK-2500, Copenhagen, Denmark
Tel: 45 3327 530
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/organism="Blumeria graminis f. sp. hordel"
/ob_xref="taxon:62688"
/clone="D00948"
/clone="lb="rambda Zap, Stratagene"
/cell_type="conidia"
/lab_host="Hordeum vulgare"
8 a 101 c 115 g 132 t
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Best Local Similarity 90.9%; Pred. No. 1.1e+02;
Matches 20; Conservative 0; Mismatches 2;
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                                                                                                                                                                                       Score 18.8; DB 12;
Pred. No. le+02;

    .391
    /organism="Coccidioides immitis"

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90.9%;
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Best Local Similarity 90.99
Matches 20; Conservative
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SST418910 Coccidioides immitis spherule cDNA library Coccidioides immitis cDNA clone CIAAK57 5' sequence, mRNA sequence.
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//deb_nost="solk"
//note="Vector: pBluescript SK(-); Site_1: EcoRl; Site_2: Xhol"
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/clone="CiAAP18"
/clone_lib="Coccidioides immitis spherule cDNA library"
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/note="Vector: pBluescript SK(-); Site_1: EcoR1; Site_2:
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/organism="Blumeria gra/db_xref="taxon:62688"
                                                                                                                                                           Location/Qualifiers
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BF251715.1 GI:16931781
                                                                                         Query Match
Best Local Similarity 90.9%;
Matches 20; Conservative
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                          Xho1
                                         142 a
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                                                                                                  Eukaryota; Fungl: Ascomycota; Pezizomycotina; Eurotiomycetes;
Eukaryota; Fungl: Ascomycota; Pezizomycotina; Eurotiomycetes;
Onygenales; mitosporic Onygenales; Coccidioides.

I (bases 1 to 488)
Gardner,M.J. and Kirkland,T.
Generation of ESTS from Coccidioides immitis spherule cDNA library
L Unpublished (2000)
Contact: Malcolm J. Gardner
Department of Eukaryotic Genomics
The Institute for Genomic Research
9712 Medical Center Drive, Rockville, MD 20850, USA
Tel: 301 838 3319
Fax: 301 838 0208
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Coccidioides immitis.
Coccidioides immitis
Eukaryota; Fundi. Ascomycota; Pezizomycotina; Eurotiomycetes;
Onygenales; mitosporic Onygenales; Coccidioides.

1 (bases 1 to 502)
Es Gardmer, M.J. and Kirkland, T.
Generation of ESTs from Coccidioides immitis spherule cDNA library
Unpublished (2000)
Contact: Malcolm J. Gardmer
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9712 Medical Center Drive, Rockville, MD 20850, USA
Tel: 301 838 3519
Fax: 301 838 0208
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EST418888 Coccidioides immitis spherule cDNA library Coccidioides immitis cDNA clone CIAAK33 5' sequence, mRNA sequence.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   /note="Vector: pBluescript SK(-); Site_1: EcoR1; Site_2:
                                                                                                                                                                                                                                                                                                                        Email: gardner@tigr.org.
Location/Qualifiers
1. 488
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Location/Qualifiers
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                                                   BF251704.1 GI:16931770
                                                                                   Coccidioides immitis.
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D01189-R Lambda Zap, Stratagene Blumeria graminis f. sp. hordei CDNA clone D01189 similar to non-functional folate binding protein, ANY92430.
ANY92430.1 GI:13904027
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Blumeria graminis f. sp. hordel
Eukaryota, Fungli Ascomycota, Pezizomycotina; Leotiomycetes;
Erysiphales; Erysiphaceae; Blumeria.
1 (bases 1 to 515)
Thomas, S.W., Rasmussen, S.W., Glaring, M.A., Rouster, J.A. and Oliver
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AR.P. dentification in the fungal pathogen Blumeria graminis by defending analysis and partogen Blumeria graminis by unpublished (2000)
Contact: Rasmussen,S.W.
Contact: Rasmussen,S.W.
Carlsberg Laboratory
Il Gl. Carlsbergyel, DK-2500, Copenhagen, Denmark
Fax: 45 3327 5530
                                                                                                                          Gaps
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Coccidioides immitis
Eukaryota; Fungl; Ascomycota; Pezizomycotina; Eurotiomycetes;
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                                                                                                                          Indels
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104 c 119 g 142 t
                                                                      Score 18.8; DB 12;
Pred. No. 1.2e+02;
0; Mismatches 2;
133 t
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Coccidioides immittis.

Coccidioides immittis.

Eukaryota; Fungi; Ascomycota; Pezizomycotina; Eurotiomycetes;

Conygenales; mitosporic Onygenales; Coccidioides.

I (bases 1 to 546)

S Gardner, M.J. and Kirkland, T.

Generation of ESTs from Coccidioides immitis spherule cDNA library

NL Unpublished (2000)

Other_ESTs: EST445665

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Exact 301 838 0208
                                                                                                                                                     BF253171 546 bp mRNA linear EST 15-NOV-2001 EST445666 Coccidioides immitis spherule cDNA library Coccidioides immitis cDNA clone CIGAB68 5' sequence, mRNA sequence.
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1 (bases 1 to 567)
Gardner,M.J. and Kirkland,T.
Generation of ESTs from Coccidioides immitis spherule cDNA library Unpublished (2000)
Contact: Malcolm J. Gardner
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         /organism="Coccidioides immitis"
/db_xref="taxon:5501"
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The Institute for Genomic Research
712 Medical Center Drive, Rockville, MD 20850, USA
Tel: 301 838 3519
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illarity 90.9%; Pred. No. 1.2e+02;
Conservative 0; Mismatches 2;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Email: gardner@tigr.org.
Location/Qualifiers
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Eukaryota; Fungi; Ascomycota; Pezizomycotina; Eurotiomycetes;

Onygenales; mitosportc Onygenales; Coccidioides.

1 (Dases 1 to 541)

Gardner,M.J. and Kirkland,T.

Generation of ESTs from Coccidioides immitis spherule cDNA library

L Unpublished (2000)

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/note="Vector: pBluescript SK(-); Site_1: EcoR1; Site_2:
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Pred. No. 1.2e+02;
0; Mismatches 2;
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Pred. No. 1.2e+02;
0; Mismatches 2;
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Fax: 301 838 0208
Email: gardner@tigr.org.
Location/Qualifiers
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/lab_host="SOLR"
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/lab_host="SOLR"
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Location/Qualifiers
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Matches 20; Conservative
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Gaps

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EST420141 Coccidioides immitis spherule cDNA library Coccidioides immitis cDNA clone CIABB92 5' sequence, mRNA sequence.
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Eukaryota; Fungl; Ascomycota; Pezizomycotina; Eurotiomycetes; Onygenales; mitosporic Onygenales; Coccidioides.

1 (bases 1 to 568)
Gardner, M.J. and Kirkland, T.
Generation of ESTs from Coccidioides immitis spherule cDNA library Unpublished (2000)
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//Organism="Coccidioides immitis"
//Organism="Coccidioides immitis"
//db_xref="texton:5501"
//clone="ClABB20"
//clone="Lib="Coccidioides immitis spherule cDNA library"
//dev_stage="spherule"
//dev_stage="Sour"
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//dex_stage="Vector: pBluescript SK(-); Site_1: EcoR1; Site_2:
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                                                                                                                                                                                                                                          Score 18.8; DB 12; Length 567; Pred. No. 1.2e+02;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Contact: Malcolm J. Gardner
Department of Eukaryotic Genomics
The Institute for Genomic Research
7712 Medical Center Drive, Rockville, MD 20850, USA
781: 301 838 9208
                                                                                                                                                                                                                                                                          Indels
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Best Local Similarity 90.9%; Pred. No. 1.2e
Matches 20; Conservative 0; Mismatches
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Query Match 81.7%; Score 18.8; DB 12; Length 568; Best Local Similarity 90.9%; Pred. No. 1.2e+02; Matches 20; Conservative 0; Mismatches 2; Indels 0; Gaps Qy 2 CGAAGTCGAGGCTTTCAGCATG 23

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Search completed: June 12, 2003, 04:35:06 Job time: 845.943 secs

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June 11, 2003, 22:21:06; Search time 348.269 Seconds (without alignments) 1921.975 Million cell updates/sec
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GenCore version 5.1.6 Copyright (c) 1993 - 2003 Compugen Ltd.
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1 dcatgctgaagcctcgacttcg 23
                                               OM nucleic - nucleic search, using sw model
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Listing first 45 summaries
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score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

Description	100 H. capsula 100 H. capsula 101 H. capsula 1021 H. capsula 1021 H. capsula 1031 Asperdina 1031 Dibaels 1031 Dibaels 10	AF06264 Endophyte AF062675 Endophyte
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& Query Match		
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Result No.	44444933331009876555555555555555555555555555555555555	45

HCC18SRRN H.Capsulatum ssp. duboisii 18S rRNA gene. 275306	275306.1 GI:1419549 18S ribosomal RNA; 18S rRNA gene; small subunit ribosomal RNA. Ajellomyces capsulatus. Ajellomyces capsulatus.	Eukaryota; Fungl; Ascomycota; Pezizomycotina; Eurotiomycetes; Onygenales; Onygenaceae; Ajellomyces.	Okeke,C.N., Kappe,R., Zakikhani,S., Nolte,O. and Sonntag,H.G. Ribosomal genes of Histoplasma capsulatum var. duboisii and var. farciminosum
NO.	VERSION 27 KEYWORDS 16 SOURCE AJ ORGANISM AJ		AUTHORS OK TITLE Ri

ALIGNMENTS

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1 DCATGCTGAAAGCCTCGACTTCG 23
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1704 bp DNA 11near PLN 10-DEC-1999

NA 275307.

275307.

18. Thosomal RNA; 18S rRNA gene; small subunit ribosomal RNA.

Ajellomyces capsulatus.

SM Ajellomyces capsulatus.

SM Ajellomyces; fungi; Ascomycota; Pezizomycotina; Eurotiomycetes; Onygenales; Onygenal
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L Submitted (06-JUL-1996) Reinhard Kappe, Hygiene & Med.
Microbiology, University of Heidelberg, Hygiene Institute, Im Microbiology, University of Heidelberg, D-69120, Germany
S Location/Qualifiers
S L . 1704
/ Crganian-"Ajellomyces capsulatus"
/ Strain-"CBS175.57"
/ Ab_xref="taxon:5037"
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Submitted (06-JUL-1996) Reinhard Kappe, Hygiene & Med.
Microbiology, University of Heidelberg, Hygiene Institute, Im
Microbiology, University of Heidelberg, B-059120, Germany
Location/Qualifiers
1. 1704
/oraliam="Ajellomyces capsulatus"
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/db_xref="taxon:5037"
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/product="18s ribosomal RNA"
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AF320009 1726 bp DNA linear PLN 13-FEB-2001
Ajellomyces capsulatus ATCC26032 18S ribosomal RNA gene, partial
sequence.
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                                                                                                                                                                                                                                                            Direct Submission
Submitted (19-MAR-1991) B.H. Bowman, Roche Molecular Systems, 1145
Atlantic Avenue, Alameda CA 94501, USA
2 (bases 1 to 1713)
Bowman, B.H., Taylor, J.W. and White, T.J.
Mollecular evolution of the fungi: human pathogens
Mol. Biol. Evol. 9 (5), 893-904 (1992)
                           PLN 30-JUN-1993
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          3 (bases 1 to 1713)
Berbee,M.L. and Taylor,J.W.
Convergence in ascospore discharge mechanism among pyrenomycete fungi based on 18 zibosomal RNA gene sequence Mol. Phylogenet. Evol. 1 (1), 59-71 (1992)
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Ajellomyces capsulatus
Eukaryota; Fungl. Ascomycota; Pezizomycotina; Eurotiomycetes;
Onygenales; Onygenacee; Ajellomyces.
1 (bases 1 to 1726)
Kasuga,T., White,T.J. and Taylor,J.W.
The Molecular Clock in Fungl in the Class Plectomycetes
Unpublished
                                                                                                                                             Ajellomyces capsulatus.
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H.capsulatum DNA for 18S ribosomal RNA, partial. X58572.45469
X58572.1 GI:2759
HS ribosomal RNA.
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end of coding region"
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AF113712
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Aspergillus niger (strain:IEF1) DNA.
Aspergillus niger (strain:IEF1) DNA.
Aspergillus niger (strain:IEF1) DNA.
Eukaryota; Fungi; Ascomycota; Pezizomycotina; Eurotiomycetes;
Eurotiales; Trichocomaceae; mitosporic Trichocomaceae; Aspergillus.

Eurotiales; Trichocomaceae; mitosporic Trichocomaceae; Aspergillus.

Shintani,T. and Matsumoto,Y.
Aspergillus niger gene for 18S rRNA, partial sequence
Al Published Only in DataBase (1999)

Le 2 (bases 1 to 494)
Shintani,T. and Matsumoto,Y.
Direct Submission

Lorette of Elline Prefecture, Laboratory of Food Process; 487-2
Kumekubota, Matsuyama, Ehlime 791-1101, Japan

(E-mail:shintani@iii-pref.ehlime.jp, URL:www.iri.pref.ehlime.jp,
Tel:81-89-976-7612, Fax:81-89-976-7313)
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Pred. No. 1.1;
1; Mismatches 0; Indels 0
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AB030916.1 GI:5738920
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                                                                                                                                                               /product="18S ribosomal RNA" a 371 c 475
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100 c 121 g 131 t
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<1. :>494
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                                                                                                                                                                                       475 g
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Best Local Similarity 95.7%;
Matches 22; Conservative
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Teloschistes of chrysophthalmus Feige and Mies ESS-6640.
Teloschistes of chrysophthalmus Feige and Mies ESS-6640
Teloschistes of chrysophthalmus Feige and Mies ESS-6640
Eukaryota; Fungi; Ascomycota; Pezizomycotina; Lecanoromycetes;
Lecanorales; Teloschistineae; Teloschistaceae; Teloschistes.

Es 1 (bases 1 to 786)
Stenroos, S.K. and DePrriest, P.T.
SSU TDNA phylogeny of cladoniiform lichens
Am. J. Bot. 85, 1548-1559 (1998)
Es 2 (bases 1 to 786)
SSU TDNA phylogeny of cladoniiform lichens
Am. J. Bot. 85, 1548-1559 (1998)
Es 2 (bases 1 to 786)
Es Charlest, P.T., Ivanova, N. and Gargas, A.
Direct Submission
Al. Submitted (31-ANG-1998) Department of Botany, NHB-166, Smithsonian Institution, National Museum of Natural History, 10th & Constitution Avenue WW, Washington, DC 20560-0166, USA
Location/Qualifiers
Irce /organism-Teloschistes of chrysophthalmus Feige and Mies ESS-6440
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Dibaeis baeomyces
Eukaryota; Fungi; Ascomycota; Pezizomycotina; Lecanoromycetes;
Lecanoromycetes incertae sedis; Icmadophilaceae; Dibaeis.
1 (bases I to 969)
Platt, J. L. and Sparafora, J. W.
Evolutionary relationships of nonsexual lichenized fungi: molecular phylogenetic hypotheses for the genera Siphula and Thamnolia from Unpublished
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    PLN 06-DEC-1999
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Platt,J.L. and Spatafora,J.W.
Direct Submission
Submitted (16-DEC-1998) Department of Botany & Plant Pathology,
Oregon State University, 2082 Cordley Hall, Corvallis, OR
97331-2902, USA
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Dibaeis baeomyces small subunit ribosomal RNA gene, partial
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/db_xref-"taxon:88650"
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189 c 243 g 268 t l others
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161 c 198 g 219 t
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Length 969;

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ASPERGIAL STARRA, 18S ribosomal RNA.
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ISM ASPERGIALLUS ANAMORI
ISM ASPERGIALLUS ANAMORI
ISM ASPERGIAL STATICHOCOMACCAC, PEZIZOMYCOLINA; EUROLIOMYCECES;
EURALYCEL; FUNGI; ASCOMYCOCA; MICOSPORIC TRICHOCOMACCAC; ASPERGIALUS
ELCOLIALES; TRICHOCOMACCAC; MICOSPORIC TRICHOCOMACCAC; ASPERGIALUS
INTERPORTATION ANAMORI Gene for 18S rRNA, partial sequence
ASPERGIALLY. and Matsumoto, Y.
ASPERGIALY. and Matsumoto, Y.
STAL PUBLISHED ONLY IN DATABASE (1999)
ACC DIRECT SUBMISSION
CONTER OF ENIME PREFECTURE, Laboratory of Food Process; 487-2
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CONTER OF ENIME PREFECTURE, L
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ABPETGIllus niger var. awamori gene for 18S rRNA, partial sequence.
ABD30917
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(E-mail:shintani@iri.pref.ehime.jp, URL:www.iri.pref.ehime.jp,
Tel:81-89-976-7612, Fax:81-89-976-7313)
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                                                                                                                                                                                                                                                                                                        Score 20.6; DB 8; Length 1031;
Pred. No. 7.7;
1; Mismatches 1; Indels 0.
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                                                                                                                                                                                                        /product="small subunit ribosomal RNA"
a 203 c 264 g 289 t
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                                                                                                                        /specific_host="Pinus sylvestris"
/db_xref="taxon:64355"
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/strain="IEF2"
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/organism="Cyclaneusma minus"
/strain="93197"
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215 c 274 g 277 t
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Best Local Similarity 91.3%;
Matches 21; Conservative
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97331-2902, USA
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Rhytismatales; Rhytismataceae; Gyclaneusma.

E 1 (basea 1 to 1031).

Gernandt, D.S., Platt, J.L., Stone, J.K., Spatafora, J.W., Holst-Jensen, A., Hamellin, R.C. and Kohn, L.M.

Holst-Jensen, A., Hamellin, R.C. and Rohn, L.M.

Mycologia 93 (5), 915-933 (2001)

E (basea 1 to 1031).

Gernandt, D.S., Platt, J.L., Stone, J.K., Spatafora, J.W., Holst-Jensen, A., Hamellin, R.C. and Kohn, L.M.

Blicet Submission

L Submitted (12-NOV-1999) Department of Botany and Plant Pathology, Oregon State University, 2082 Cordley Hall, Corvallis, OR
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Cyclaneusma minus small subunit ribosomal RNA gene, partial
                                                                                                                                                                                                                                                            AF107345 990 bp DNA 11near PLN 10-NOV-1999
Dibaeis baeomyces small subunit ribosomal RNA gene, partial
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                                                                                                                                                                                                                                                                                                                                                                                                                   Dibaeis baeomyces.

Dibaeis baecomyces

Bukaryota; Fungil. Ascomycota; Pezizomycotina; Lecanoromycetes;

Lecanoromycetes incertae sedis; Icmadophilaceae; Dibaeis.

1 (bases 1 to 990)

Platt,J.L., Camacho,F.J. and Spatafora,J.W.

Prolution of the lichen symbiosis within the Leotiales; molecular phylogenetic hypotheses for Dibaeis and Baeomyces
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Platt.J.L. and Spatafora,J.W.
Direct Submission
Submitted (18-NOV-1998) Botany & Plant Pathology, Oregon State University, 2082 Condley Hall, Corvalits, OR 97331, USA Location/Qualifiers
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                        1; Indels
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/product="small subunit ribosomal RNA"
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/organism="Dibaeis baeomyces"
/isolate="OSC56400"
/db_xref="taxon:83478"
91.3%; Pred. No. 7.6;
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AF203458.1 GI:9622908
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AF107345.1 GI:6318520
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11 Similarity 91.3%;
21; Conservative 1
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Best Local Similarity 91.3%
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Gaps

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Eukaryotta; Fungi; Ascomycota; Pezizomycotina; Eurotiomycetes; Eurotiales; Trichocomaceae; mitosporic Trichocomaceae; Aspergillus. 1 (bases I to 1673)
Melchers, W.J., Verweij, P.E., van den Hurk, P., van Belkum, A., De Pauw, B.E., Hoogkamp-Korstanje, J.A. and Meis, J.F. General primer-mediated PCR for detection of Aspergillus species 55014936
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Direct Submission
Submitted (24-JUN-1997) Kappe R., Hygiene Institute, University of
Heidelberg, Im Neuenheimer Feld 324 D-69120 GERMANY
Location/Qualifiers
                                                                                                                                                                                                                2 (bases 1 to 1673)
Melchers,W.J.G.
Direct Submission
Submitted (12-NAR-1994) W.J.G. Melchers, Department of Medical
Microbiology, University of Nijmegen, P O Box 9101, 6500 HB
Nijmegen, NETHERLANDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Eukaryota; Fungi, Ascomycota; Pezizomycotina; Eurotiomycetes;
Eurotiales; Trichocomaceae; mitosporic Trichocomaceae;
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Zakikhani,S., Okeke,C.N. and Kappe,R.
18S rDNA sequence of Paecilomyces variotii CBS339.51
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/gene="18s rRNA"
/product="18s ribosomal RNA"
/evidence=experimental .
363 c 467 g 426 t
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Paecilomyces variotii 18S rRNA gene.
Y13996
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1. 1673
/organism="Aspergillus ni/isolate="CBS102.12"
/db_xref="taxon:5061"
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18S ribosomal RNA; 18S rRNA gene.
Pecilomyces variotii.
Paecilomyces variotii.

    1678
    /organism="Paecilomyces/strain="CBS339.51"

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/db_xref="taxon:45996"
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365 c 458 q
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1 (bases incertae sedis; Icmadophilaceae; Siphula.

1 (bases incertae)

2 tentoos, S., Lohtander, R. and Tehler, A.

Direct Submission

Submission

Submission

Submitted (27-SEP-1996) Botany, National Museum of Natural History, Smithsonian Institution, NHB-166, 10th St. & Constitution Ave., Washington, DC 20560, USA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               PLN 30-JUL-1997.
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Siphula ceratites 18S small subunit ribosomal RNA gene, complete
sequence.
                                                                           between the
                                                                                                                                                            Direct Submission.
Submitted (11-JAN-1996) Sara Landvik, Ecological Botany, Umea,
S-90187, Sweden
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Eukaryota; Fungl; Ascomycota; Pezizomycotina; Leotiomycetes; Helotiales; Helotiales incertae sedis; Amylocarpus.

1 (bases 1 to 1479)
Landvik,S., Shailer,N.F.J. and Eriksson,O.E.
SSU rDNA sequences support for a close relationship between telaphomycetales and the Eurotiales and Onygenales
Mycoscience 37, 237-241 (1996)
2 (bases 1 to 1479)
Landvik,S., Shailer,N.F.J. and Eriksson,O.E.
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/product="18S small subunit ribosomal RNA"
343 c 442 g 439 t
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                                                                                                                                                                                                                                            /organism="Amylocarpus encephaloides"
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/db_xref="taxon:45428"
1. 1479
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    /organism="Siphula ceratites"
/db_xref="taxon:53373"

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Length 1673;

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1 others

PLN 23-JUL-1997

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Dibaeis baecmyces.

Eukaryota; Fungi; Ascomycota; Pezizomycotina; Lecanoromycetes;
Eukaryota; Fungi; Ascomycota; Pezizomycotina; Lecanoromycetes;
Lecanoromycetes incertae sedis; Icmadophilaceae; Dibaeis.

E canoromycetes incertae sedis; Icmadophilaceae; Dibaeis.

E canoromycetes; Lecanoromycetes;
Loases ito 1686)

Evolutionary relationships of nonsexual lichenized fungi: molecular phylogenetic hypotheses for the genera Siphula and Thamnolia from SVU and LSU rDNA analyses
Li Unpublished

E 2 (bases 1 to 1686)
E 3 (bases 1 to 1686)
E 4 (bases 1 to 1686)
E 5 Platt.J.L. and Spatafora, J.W.

E 6 Direct Submission
E 8 Submission
E 8 Submission
E 8 Submission
E 8 Submission
E 97331-2902, USA
                                                                                                                                                                           1686 bp DNA linear PLN 06-DEC-1999 Distribuses isolate OSC53939 small subunit ribosomal RNA AF113713
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/organism="Dibaeis baeomyces"
/isolate="OSC53939"
/db_xref="taxon:83478"
<1..>1686 /product="small subunit ribosomal RNA"
/1 a 346 c 438 g 460 t 1 others
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439.686 Million cell updates/sec
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/SIDS2/goddata/geneseq/geneseqn-embl/NA1994_DAT;
/SIDS2/goddata/geneseq/geneseqn-embl/NA1995_DAT;
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Copyright (c) 1993 - 2003 Compugen Ltd.
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ALIGNMENTS

Probe; detection; Histoplasma capsulatum; 18S; rRNA; rDNA; hybridisation; Saccharomyces cerevisiae; fungus; phylogenetic; helper probe; soil; water; Blastomyces dermatitidis; quantitation; sample; body fluid; ss. Histoplasma capsulatum-specific DNA hybridisation probe. AAQ73433/c ID AAQ73433 standard; DNA; 22 BP. 91US-0720587. 91US-0720587 18-MAY-1995 (first entry) (GENP-) GEN-PROBE INC. WPI; 1994-316178/39. 28-JUN-1991; 28-JUN-1991; 04-OCT-1994. US5352579-A. Milliman CL; Synthetic. AAQ73433;

Hybridisation probe specific for Histoplasma capsulatum - allowing differentiation from all other fungi for detection or

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Sequence 22 BP; 5 A; 7 C; 5 G; 5 T; 0 other;
fluids, tissue samples, soil and water.
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                                                                                  A probe (AAQ73433) or its complement (AAQ73436) and corresponding RNA sequences (AAQ73437 and AAQ86436) used for the specific detection of all strains of Histoplasma capsulatum (H.c.). The probes are manufactured complementary to the H.c. 185 rRNA or rDNA gene. This region also corresponds to the bases 172-193 of Saccharomyces cerevisiae 185 rRNA. The probe is specific for H.c. and can be used to distinguish the fungus from all others, even its nearest phylogenetic neighbour Blastomyces dermatitidis. Nucleic acid hybridisation of the specific probe is enhanced by the use of helper probes (AAQ73434-5). This method allows the detection and/or the quantitation of H.c. from samples e.g. body
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         quantitation in body fluids, etc.
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                       100.0%; Pred. .v..
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Olsen PB;

Shuster JR, Kauppinen S, Clausen IG,

99US-0273623

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Monitoring differential expression of genes in filamentous fungal cells uses fluorescence-labeled nucleic acids isolated from the cells and a
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                          Aspergillus niger.
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                                                                                                                Histoplasma capsulatum-specific complementary RNA hybridisation probe.
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                AAQ86436 standard; RNA; 22 BP.
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The present invention describes a method for monitoring differential expression of genes in a first filamentous fungal (FF) cell relative to expression of the same genes in one or more second filamentous fungal cells. The method uses fluorescence-labeled nucleic acids isolated from the Fr cells and a substrate of expressed sequence tags (EST). The ESTS care used in the methods for monitoring differential expression of genes in a first filamentous fungal (FF) cell relative to expression of genes in a first filamentous fungal cells. Monitoring the global expression of genes from FF cells allows the production of potential of the microorganisms to be improved. New genes may be discovered, possible functions of unknown open reading frames can be discovered, possible functions of unknown open reading frames can be conditioned. The expression of genes can be used to study how FF cells adapt to changes in culture conditions, environmental stress, spore adapt to changes in culture conditions, environmental stress, spore confineering. Using ESTS provides several advantages over genomic or random cDNA clones including elimination of redundancy as one spot on an exray equals one gene or open reading frame, and organisation of the microarrays based on function of the gene products to facilitate confineering values one gene or open reading frame, and organisation of the microarrays based on function of the gene products to facilitate confineering values one spot on an exaray equals one gene or open reading frame, and organisation of the microarrays based on function of the gene products to facilitate confineering values one spot on an exaray equals one gene or open reading frame, and organisation of the microarrays based on function of the gene products to facilitate confineering values or spot on an exaray equals one gene or open to spot on an exaray equals one gene or open exaray exar
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Mismatches
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Query Match
Best Local Similarity 91.38
Matches 21; Conservative
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Note: The sequence data for this patent did not form part of the printed
(OSAQ ) OSAKA CITY.
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                                                                                                                                                                                                                                                                                                                AAI99683;
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                                                                                                                                                                                                                                       This invention describes a novel method for detecting Aspergillus nucleic acid (I) in a body sample which comprises the isolation of (I) followed by a two-step polymerase chain reaction (PCR) amplification of any nucleic acid having a sequence essentially homologous to part of the 3'-end of the Aspergillus 185 rRNA gene using primers used in the first step that do not overlap with those in the second step. The method is used for early disgnosis, and monitoring, of aspergillosis, particularly invasive infections in hematological-oncological patients with long-term suppression of the immune system. Unlike the known method using overlapping primers, this process provides efficient and reliable detection of Aspergillus in clinical situations. It is specific for Aspergillus (it detects the species terreus, niger, versicolor, clavatus, flavus, and fumigatus, but not oryzae, nor bacteria or fungi from any
                                                                                                                                                                                                                                                                                                                                                                            other genera). This sequence represents the DNA sequence of Aspergillus funigatus 18S RNA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                     Gaps
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                                                                                                                                                                                      Detecting Aspergillus nucleic acid in body samples by two-step
polymerase chain reaction, for diagnosing aspergillosis
                                                                                                                                                                                                                                                                                                                                                                                                                               DB 20; Length 1733; 7.4;
                                                                                                                                                                                                                                                                                                                                                                                                                                                     Indels
                                                                                                                                                                                                                                                                                                                                                                                                             Sequence 1733 BP; 446 A; 374 C; 475 G; 438 T; 0 other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                    1; Mismatches
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                                                                                                                                                                                                                                                                                                                                                                                                                                Score 19;
                                                                                                                                                                                                                                                                                                                                                                                                                                          Pred. No.
                                                                                                                                               Skladny H;
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                                                                                                                                                                                                                                                                                                                                                                                                                                82.6%;
87.0%;
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                                                            98DE-1006274
                                                                                 98DE-1006274
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                                                                                                                                               Buchheidt D, Hehlmann R,
                                                                                                                                                                                                                                                                                                                                                                                                                                          Local Similarity 87.0 nes 20; Conservative
Aspergillus fumigatus
                                                                                                                                                                  WPI; 1999-470047/40.
                                                                                                     (висн/) висинетот р.
                                                                                                                 HEHLMANN R.
                                                                                                                          (SKLA/) SKLADNY H.
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                    DE19806274-A1
                                                                                 16-FEB-1998;
                                                            16-FEB-1998;
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                                        19-AUG-1999
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The invention relates to evaluating strain variation within and between different populations of the tuberculosis bacterial pathogen, why cobacterium therculosis or related Mycobacterium by determining the nuclectide sequence of the first strain at positions in the complete sequence of the genome that correspond to positions that differ in the nuclectide sequences of M. tuberculosis strains CCC 1551 (AAI99683) and H37Rv (AAI99682). The method is useful for evaluating strain variation of M. tuberculosis and has valuable application in the fields of
                                                                                                                                                                                                                   The present invention relates to a new microbe of Acinetobacter or .

Burkholderis genus producing aldonic acid and oxidising specifically the hemiacetal hydroxy group of a saccharide having said hydroxy group.

Aldonic acid is used as a mineral relationcing agent. The present sequence was used to illustrate the present invention.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Gaps
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Mycobacterium tuberculosis; strain H37Rv; strain CDC 1551; genome; variation; epidemiology; patient treatment; epidemic monitoring; ds
                                                     A new microbe for producing aldonic acid, comprises a new strain of Acinetobacter or Burkholderis –
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                              DB 24; Length 1745;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Indels
                                                                                                                                                                                                                                                                                                                                                                                                              Sequence 1745 BP; 448 A; 382 C; 465 G; 450 T; 0 other;
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Pred. No. 49;
1; Mismatches
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Disclosure; Page 17; 22pp; Japanese.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1 DCATGCTGAAAGCCTCGACTTCG 23
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AAI99683 standard; DNA; 4403765 BP.
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82.68;
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Best Local Similarity 82.6
Matches 19; Conservative
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WPI; 2002-002933/01.
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                                                   Sequence 4403765 BP; 757105 A; 1447799 C; 1441301 G; 757371 T; 189 other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Note: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format directly from USPTO at seqdata.uspto.gov/sequence.html?DocID=6294328B1:
specification, but was obtained in electronic format directly from USPTO
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Evaluating strain variation of Mycobacterium tuberculosis, comprises determining the nucleotide sequence of the strain at positions in the genome corresponding to positions where M. tuberculosis strains CDC 1551 and H37Rv differ
                                                                                                                               Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                           Mycobacterium tuberculosis; strain H37Rv; strain CDC 1551; genome; variation; epidemiology; patient treatment; epidemic monitoring; ds.
                                                                                      Score 17.4; DB 22; Length 4403765;
Pred. No. 1.2e+02;
1; Mismatches 3; Indels 0; G
                                                                                                                                                                                                                                                                                                                                                                                                        Mycobacterium tuberculosis strain H37Rv genome SEQ ID NO 1.
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                   at seqdata.uspto.gov/sequence.html?DocID=6294328B1.
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                                                                                                                                                                                 1 DCATGCTGAAAGCCTCGACTTCG 23
                                                                                                                                                                                                                                                                                            AA199682 standard; DNA; 4411529 BP
                                                                                        75.7%;
ilarity 82.6%;
Conservative
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Mycobacterium tuberculosis.
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Best Local Similarity 82.6
Matches 19; Conservative
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                                                                                                         Similarity
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                                                                                                                                                                                                                                                                                                                             AA199682;
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Best Local &
                                                                                                                                                                                                                                                        RESULT 9
AAI99682/C
                                                                                                                           Matches
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The invention relates to isolated polynuclectide (I) and polypeptide (II) sequences. (I) is useful as hybridisation probes, polypeptide (II) sequences. (I) is useful as hybridisation probes, polymerase chain reaction (PCR) primers, oligomers, and for chromosome and gene mapping, and in recombinant production of (II). The carbon distribution expressed sequence tags for identifying expressed genes. (I) is useful in gene therapy techniques to restore normal activity of (II) or to treat disease states involving (II). (II) is useful for generating antibodies against it, detecting or quantitating a polypeptide in tissue, as molecular weight markers and as a food supplement. (II) and its binding partners are useful in medical imaging of sites expressing (II). (I) and (II) are useful for treating disorders involving aberrant protein expression or biological activity. The polypeptide and polynucleotide sequences have applications in diagnostics, forensics, gene mapping, identification of mutations responsible for genetic disorders or other traits to assess blodiversity and to produce other types of data and products dependent on DNA and amino acid sequences. Abs64197-Ab54564 represent novel human
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Note: The sequence data for this patent did not appear in the printed specification, but was obtained in electronic format directly from WIPO
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                                                                                                                                                    Human; chromosome mapping; gene mapping; gene therapy; forensic; food supplement; medical imaging; diagnostic; genetic disorder; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             New isolated polynucleotide and encoded polypeptides, useful in diagnostics, forensics, gene mapping, identification of mutations responsible for genetic disorders or other traits and to assess biodiversity
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67;
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                                                                                                              DNA encoding novel human diagnostic protein #1118.
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AAS65314 standard; cDNA; 492 BP.
                                                                                                                                                                                                                                                                                                                                                                 31-MAR-2000; 2000US-0540217, 23-AUG-2000; 2000US-0649167,
                                                                                                                                                                                                                                                                                                                             30-MAR-2001; 2001WO-US08631
                                                                            (first entry)
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P-PSDB; ABG01127.
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nes 18; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                           (HYSE-) HYSEQ INC.
                                                                                                                                                                                                                                                  W0200175067-A2.
                                                                                                                                                                                                                Homo sapiens,
                                                                          13-FEB-2002
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                                      AAS65314;
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Matches
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Gaps

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Indels

Score 17.4; DB 22; Length 4411529; Pred. No. 1.2e+02;

Pred. No. 1.26 1; Mismatches

75.78;

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DCATGCTGAAAGCCTCGACTTCG 23

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ABA44550;

RESULT 11

Human

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Human; foetal liver; gene expression; single exon nucleic acid probe; as
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                                                                                                                                                                                                                                                Human foetal liver single exon nucleic acid probe #3302.
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ABA54997 standard; DNA; 454 BP.
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21-SEP-2000; 2000US-0234687.
27-SEP-2000; 2000US-0236359.
04-OCT-2000; 2000GB-0024263.
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2000US-0608408
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es 18; Conserv
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HID WAR KEN KAN THE TOTAL 
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                                                                                                                                                                                                                                                                                                                                                                                                           Human; microarray; single exon probe; gene expression; breast;
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                                                                                                                                                                                                                                                                                                                         breast cell single exon nucleic acid probe #3245.
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Mismatches
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                                                                         ABA44550 standard; DNA; 454 BP.
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03-AUG-2000; 2000US-0632366.
21-SEP-2000; 2000US-0234687.
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04-OCT-2000; 2000GB-0024263.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                          disease; cancer; ss.
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Penn SG,

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Gapa
                                                                                                                                                                               Probe #3226 for gene expression analysis in human heart cell sample.
                                                                                                                                                                                                  Human; gene expression; heart; microarray; vascular system; probe; cardiovascular disease; hypertension; cardiac arrhythmia; congenital heart disease; ss.
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Query Match

Best Loca Matches

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RESULT 12 ABA54997

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21-SEP-2000;

04-FEB-2000; 26-MAY-2000;

09-AUG-2001

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The present invention provides a number of single exon nucleic acid probes which are derived from genomic sequences expressed in the human brain. They can be used to measure gene expression in brain cell samples, which may enable the diagnosis and improved treatment of nervous system diseases such as Alzheimer's disease, multiple sclerosis, schizophrenia, epilepsy and cancers. The present sequence is one of the probes of the
                                                                                                                                                                                                                                                     Single exon nucleic acid probes for analyzing gene expression in human brains -
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  exon; gene expression analysis; probe;
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                                                                                                                                                                                                                                                                                                           Example 4; SEQ ID NO: 3257; 650pp + Sequence Listing; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Length 454;
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                                                                                                                                                                           Rank DR;
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                                                                                                                                  (MOLE-) MOLECULAR DYNAMICS INC.
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                                   2000US-0632366.
2000US-0234687.
2000US-0236359.
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                                                                                               2000GB-0024263
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2000US-0608408
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                                                                                                                                                                       Hanzel DK,
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                                                                                                                                                                                                              WPI; 2001-483446/52
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                                   03-AUG-2000;
21-SEP-2000;
27-SEP-2000;
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27-SEP-2000;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 measuring human gene expression in a sample derived from human heart. The present sequence is one such probe. The probes may be used for predicting, measuring and displaying gene expression in samples derived from the human heart via microarrays. By measuring gene expression, the probes are useful for predicting, diagnosing, grading, staging, monitoring and prognosing diseases of the human heart and vascular system c.g. cardiovascular disease, hypertension, cardiac arrhythmias and Note: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format directly from WIPO at the valor are sequenced.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ö
                                                                                                                                                                                                                                                                                                                                                                                                Single exon nucleic acid probes for analyzing gene expression in human
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 The present invention relates to single exon nucleic acid probes for
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Human; brain expressed exon; gene expression analysis; probe; microarray; Alzhelmer's disease; multiple sclerosis; schizophrenia;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  DB 22; Length 454;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Human brain expressed single exon probe SEQ ID NO: 3257.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Sequence 454 BP; 135 A; 84 C; 120 G; 115 T; 0 other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         .;
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Pred. No. 84;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                        Claim 1; SEQ ID No 3226; 530pp; English.
                                                                                                                                                                                                                                                                                                                          DR;
                                                                                                                                                                                                                                                                                                                          Rank
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                                                                                                                                                                                                                                                                                (MOLE-) MOLECULAR DYNAMICS INC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       BP
                                                                                                                                                                                                                                                                                                                       Chen W,
                                                                                                                                        20000S-0207456.
20000S-0608408.
20000S-0632366.
20000S-0234687.
20000S-0236359.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              73.0%;
90.0%;
                                                                                                                                                                                                                    27-SEP-2000; 2000US-0236359.
04-OCT-2000; 2000GB-0024263.
                                                                                30-JAN-2001; 2001WO-US00666
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AAK03266 standard; DNA; 454
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          30-JAN-2001; 2001WO-US00667
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               04-FEB-2000; 2000US-0180312
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nes 18; Conservative
                                                                                                                                                                                                                                                                                                                   Penn SG, Hanzel DK,
                                                                                                                                                                                                                                                                                                                                                           WPI; 2001-488899/53.
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    WO200157274-A2.
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Query Match

à g 05-NOV-2001

AAK03266;

RESULT 14 **AAK0326**6 Homo saptens

09-AUG-2001

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Gaps

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The present invention provides a number of single exon nucleic acid probes which are derived from genomic sequences expressed in the human bone marrow. They can be used to measure gene expression in bone marrow samples, which may enable the improved diagnosis and treatment of cancers such as lymphoma, leukaemia and myeloma. The present sequence is one of the probes of the invention.
                                              Example 4; SEQ ID NO: 3276; 658pp + Sequence Listing; English.
analyzing gene expression in human bone marrow -
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DB 22; Length 454; 2; Indels ; Score 16.8; DB ; Pred. No. 84; 0; Mismatches Query Match 73.0%; Best Local Similarity 90.0%; Matches 18; Conservative 0 ò g

Sequence 454 BP; 135 A; 84 C; 120 G; 115 T; 0 other;

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Gaps ö

Search completed: June 12, 2003, 01:44:42 Job time : 133.802 secs

Perfect score:

Run on:

Sequence:

Scoring table:

Searched:

Minimum DB Maximum DB

Database

Result Š.

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Sequence 18, Appl.
Sequence 14, Appl.
Sequence 14, Appl.
Sequence 14, Appl.
Sequence 10, Appl.
Sequence 281, Appl.
Sequence 281, Appl.
Sequence 105, Appl.
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Sequence 1, Appli
Sequence 18, Appl
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Sequence 13,
Sequence 13,
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            MEDION TYPE: 3.5" Diskette, 1.44 Mb storage COMPUTER: IBM PS/2 Model 502 or 553X OPERATING SYSTEM: IBM P.C. DOS (Version 3.30) SOFTWARE: WORDPERFECT (Version 5.0) CURRENT APPLICATION DATA: APPLICATION NUMBER: US/07/720,587A FILING DATE: 19910628 CLASSIFICATION A35 PRIOR APPLICATION DATA: PRIOR APPLICATION DATA: APPLI
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   GENERAL INFORMATION:
APPLICANT: Curt L. Milliman
TITLE OF INVENTION: NUCLEIC ACIDS PROBES
TITLE OF INVENTION: TO HISTOPLASMA CAPSULATUM
NUMBER OF SEQUENCES: 3
CORRESPONDENCE ADDRESS:
ADDRESSE: Lyon & Lyon
STREET: 611 West Sixth Street
CITY: Los Angeles
STATE: California
COUNTY: USA
ZIP: 90017
COMPUTER READALE FORM:
                              US-09-172-019-18
US-09-166-094-18
US-08-055-945-1
US-08-148-910-14
US-08-148-937A-14
US-09-645-073-1
US-09-221-0173-1
US-08-920-812-13
US-08-921-177-13
US-08-921-177-13
US-08-921-177-13
US-08-921-177-13
US-08-920-821-177-13
US-08-920-821-177-13
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US-08-920-821-177-13
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Best Local Similarity 100.0%; Pred. No. 0.019;
Matches 22; Conservative 0; Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              US-09-103-840A-2
US-08-093-144-5
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REGISTRATION NUMBER: 32,327
REFRENCE/DOCKET NUMBER: 193/121
TELECOMMUNICATION INFORMATION:
TELEPHONE: (213) 955-0440
TELERAX: 67-3510
INFORMATION FOR SEQ ID NO: 1:
SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Sequence 1, Application US/07720587A
Patent No. 5352579
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ATTORNEY/AGENT INFORMATION:
1460
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US-07-720-587A-1
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US-07-720-587A-1/c
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Sequence 22,
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1: /cgn2_6/ptodatca1/ina/5A_COMB.seq:*

2: /cgn2_6/ptodatca1/ina/5B_COMB.seq:*

3: /cgn2_6/ptodatca1/ina/6B_COMB.seq:*

4: /cgn2_6/ptodatca1/ina/6B_COMB.seq:*

5: /cgn2_6/ptodatca1/ina/PcTUS_COMB.seq:*

6: /cgn2_6/ptodatca1/ina/PcTUS_COMB.seq:*
                           GenCore version 5.1.6
Copyright (c) 1993 - 2003 Compugen Ltd.
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US-08-326-789-13
US-08-36-789-13
US-09-166-093-22
US-09-166-093-22
US-09-166-094-22
US-09-166-093-12
US-09-166-093-12
US-09-166-093-12
US-09-166-093-12
US-09-166-093-12
US-09-166-093-12
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US-09-166-094-12
US-09-166-094-12
US-09-166-094-12
US-08-12-903A-3
US-08-12-903A-3
US-08-11-903A-7
US-08-11-903A-7
US-08-11-903A-7
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  US-09-420-592A-3
US-08-392-338A-18
US-09-166-750-18
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              441362 seqs, 153338381 residues
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              SUMMARIES
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Maximum Match 100%
Listing first 45 summaries
                                                                                                                                                  OM nucleic - nucleic search, using sw model
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Gapop 10.0 , Gapext 1.0
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23
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seq length: 200000000
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Match Length DB
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GENERAL INFORMATION:
APPLICANT: Whitlow, Marc
APPLICANT: Filpula avid
TITLE OF INVENTION: Linker For Linked Fusion Polypeptides
NUMBER OF SEQUENCES: 25
CORRESPONDENCE ADDRESS:
ADDRESSEE: Sterne, Kessler, Goldstein & Fox
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             APPLICANT: BITG, Robert
TPELICANT: Filpula, David
TILLE OF INVENTION: Multivalent Antigen-Binding Proteins
NUMBER OF SEQUENCES: 23
CORRESPONDENCE ADDRESS:
ADDRESSEE: Sterne, Kessler, Goldstein & Fox P.L.L.C.
STREET: 1100 New York Avenue, NW
                                                                                                                                                                                                                                                                                                                                                                                                                              SOFTWARE: Patentin Release #1.0, Version #1.25
CUBRENT APPLICATION DATA:
AUBLICATION NUMBER: US/08/224,591
FILING DATE: Herewith
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  DB 2;
                                                                                                                                                                                                       E: Sterne, Kessler, Goldstein & Fox 1100 New York Avenue, Suite 600
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   NAME: GOLdstein, Jorge A.
REGISTRATION NUMBER: 29,021
REFERENCE/DOCKET NUMBER: 0977.1920002/JAG
TELECOMMUNICATION INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Pred. No. 45;
0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              CLASSIFICATION: 530
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/002,845
FILING DATE: 15-JAN-1993
APPLICATION NUMBER: US 07/980,529
FILING DATE: 20-NOV-1992
ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                        MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Sequence 22, Application US/08392338A Patent No. 5869620 GENERAL INFORMATION:
                  Sequence 13, Application US/08224591
Patent No. 5856456
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                332 TGCTGAAAGGCTCTACTTC 350
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TELEPHONE: (202) 371-2600
TELEFAX: (202) 371-2540
INFORMATION FOR SEQ ID NO: 13
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                68.7%;
89.5%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              APPLICANT: Whitlow, Marc
APPLICANT: Wood, James F.
APPLICANT: Hardman, Karl
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CDS
join(1..726)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Query Match
Best Local Similarity 89.5
Matches 17; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   SEQUENCE CHARACTERISTICS:
LENGTH: 738 base pairs
TYPE: nucleic acid
STRANDEDNESS: both
                                                                                                                                                                                                                                                                                                                                     COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy
                                                                                                                                                                                                                                          CITY: Washington
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Washington
                                                                                                                                                                                                                                                                    STATE: D.C.
COUNTRY: U.S.A.
ZIP: 20005
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     US-08-392-338A-22
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ; LOCATION:
US-08-224-591-13
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OTHER INFORMATION: "n" bases at various positions throughout the sequence
COTHER INFORMATION: represent a, t, c or g
US-09-103-840A-2
                                                                                                                                                                                                                                          APPLICANT: WHITE, Owen R.
APPLICANT: FRASER, Claire M.
APPLICANT: VERSER, Claire M.
APPLICANT: VENTER, John C.
TITLE OF INVENTION: DNA SEQUENCES FOR STRAIN ANALYSIS IN MYCOBACTERIUM
TITLE OF INVENTION: TUBERCULOSIS
FILE REFERENCE: 24366-2000/.00
CURRENT APPLICATION NUMBER: US/09/103,840A
SOURRENT FILLED DAYS: 2
SOFTWARE: PATENTIN VOS: 2
SOFTWARE: PATENTIN VET: 2.1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            APPLICANT: FLEISCHMAN, Robert D.
APPLICANT: WHITE, Owen R.
APPLICANT: WHITE, Owen R.
APPLICANT: WHITE, Owen R.
APPLICANT: VENTER, Claire M.
APPLICANT: VENTER, John C.
TITLE OF INVENTION: TUBERCULOSIS
FILE REFERENCE: 1986-20007.00
CURRENT APPLICATION NUMBER: 1998-06-24
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  DB 4; Length 4403765;
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Pred. No. 21;
1; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Query Match 75.7%; Score 17.4; D
Best Local Similarity 82.6%; Pred. No. 21;
Matches 19; Conservative 1; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   172072 TCATGGTGAAAGCCTCGACAGCG 172050
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TYPE: DNA ORGANISM: Mycobacterium tuberculosis
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1 DCATGCTGAAAGCCTCGACTTCG 23
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ; TYPE: DNA

: ORGANISM: Mycobacterium tuberculosis

: CTHER INFORMATION: H37Rv

US-09-103-840A-1
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2 CATGCTGAAAGCCTCGACTTCG 23
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Sequence 1, Application US/09103840A Patent No. 6294328
                                       22 CATGCTGAAAGCCTCGACTTCG 1
                                                                                                                                                     Sequence 2, Application US/09103840A
Patent No. 6294328
                                                                                                                                                                                                  GENERAL INFORMATION:
APPLICANT: FLEISCHMAN, ROBERT D.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Query Match 75.7%;
Best Local Similarity 82.6%;
Matches 19; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 NUMBER OF SEQ ID NOS: 2
SOFTWARE: PatentIn Ver. 2.1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         GENERAL INFORMATION:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                      SEQ ID NO 2
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Gaps

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Indels

RESULT 4

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Length 738;

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APPLICANT: Hardman, Karl
APPLICANT: Bird, Robert
APPLICANT: Filpula, David
APPLICANT: Rollence, Michelle
TITLE OF INVENTION: Methods for Producing Multivalent Antigen-Binding
TITLE OF INVENTION: Proteins
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Length 738;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    E: Sterne, Kessler, Goldstein & Fox P.L.L.C. 1100 New York Avenue, NW
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       SOFTWARE: Patentin Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/09/166,750
FILING DATE: Herewith
CLASSIFICATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            DB 2;
                      PRIOR APPLICATION DATA:

APPLICATION NUMBER: US 07/980,529
FILING DATE: 20.NOV-1992
ATTORNEY/AGENT INFORMATION:
NAME: Goldstein, Jorge A.
REISTRATION NUMBER: 29,021
REFERENCE/DOCKET NUMBER: 0977.1920002/JAG
FELECOMMUNICATION INFORMATION:
TELEFAX: (202) 371-2600
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Pred. No. 45;
0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Score 15.8;
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APPLICATION NUMBER: US 08/392,338
FILING DATE: 22-FEB-1995
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 07/989,846
FILING DATE: 20-NOV-1992
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 07/796,936
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25-NOV-1991
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ZIP: 20005
COMPOTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPOTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Sequence 22, Application US/09166750 Patent No. 6025165 GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    332 TGCTGAAAGGCTCTACTTC 350
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Query Match 68.7%;
Best Local Similarity 89.5%;
Matches 17; Conservative
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ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  APPLICANT: Whitlow, Marc
APPLICANT: Wood, James F
APPLICANT: Hardman, Karl
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Join(1..726)
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CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ADDRESSEE: Sterne,
STREET: 1100 New Y
CITY: Washington
STATE: D.C.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              COUNTRY: U.S.A. ZIP: 20005
                                                                                                                                                                                                                                                                                                                                                                                         TOPOLOGY: both FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                      ; NAME/KEY:
; LOCATION:
US-08-926-789-13
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Sequence 13, Application US/08926789
Patent No. 5990275
GENERAL INFORMATION:
APPLICANT: Whitlow, Marc
APPLICANT: Filpula, David
TITLE OF INVENTION: Linker For Linked Fusion Polypeptides
NUMBER OF SEQUENCES: 25
CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Indels
                                                           COMPUTER: FLOPPY disk
COMPUTER: IBM PC compatible
COMPUTER: IBM PC compatible
COMPUTER: Patentin Release #1.0,
SOFTWARE: Patentin Release #1.0,
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/392,338A
FILING DATE: 22-FEB 1995
PIOR APPLICATION NUMBER: US 07/989,846
FILING DATE: 20-NOV-1992
PROR APPLICATION NUMBER: US 07/989,846
FILING DATE: 25-NOV-1992
APPLICATION NUMBER: US 07/796,936
FILING DATE: 25-NOV-1991
ATORNEY/AGENT INFORMATION:
NAME: GOLdstein, Jorge A.
REGISTRATION NUMBER: US 07/70030007
TELECOMMULCATION NUMBER: US 07/70030007
TELEPHONE: (202) 371-2500
INFORMATION FOR SEQ ID NO: 22:
SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       COMPUTER REALABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/926,789
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                DB 2;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     3: Sterne, Kessler, Goldstein & Fox
1100 New York Avenue, Suite 600
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             0; Mismatches
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APPLICATION NUMBER: US 08/002,845
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   PRIOR APPLICATION DATA:
APPLICATION NUMBER: 08/224,591
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 332 TGCTGAAGGCTCTACTTC 350
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          4 TGCTGAAAGCCTCGACTTC 22
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Query Match
Best Local Similarity 89.5%;
Matches 17; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               LENGTH: 738 base pairs
TYPE: nucleic acid
                                               COMPUTER READABLE FORM:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ADDRESSEE: Sterne, STREET: 1100 New Y CITY: Washington STATE: D.C. COUNTRY: U.S.A. ZIP: 20005
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          NAME/KEY: CDS
LOCATION: 1..726
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COUNTRY:
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Patent No. 6103889
GENERAL INFORMATION:
APPLICANT: Whitlow, Marc
APPLICANT: Hardman, Karl
APPLICANT: Bird, Robert
APPLICANT: Filpula, David
TITLE OF INVENTION: Nucleic Acid Molecules Encoding Single-Chain
TITLE OF INVENTION: Antigen-Binding Proteins (As Amended)
NUMBER OF SEQUENCES: 23
CORRESPONDENCE ADDRESS:
ADDRESSEE: Sterne, Kessler, Goldstein & Fox P.L.L.C.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            DB 3; Length 738;
                                                                                                                                                                             Score 15.8; DB 3; Length 738;
                                                                                                                                                                                                                             Indels
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
COMPUTER: IBM PC compatible
CORFATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/09/172,019
FILING DATE: Herewith
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           NAME: Goldstein, Jorge A.
REGISTRATION NUMBER: 29,021
REFERENCE/DOCKET NUMBER: 0977.003000D
TELECOMMUNICATION INFORMATION:
TELEPHONE: (202) 371.2600
TELEPHONE: (202) 371.2600
INFORMATION FOR SEQ ID NO: 22:
SEQUENCE CHARACTERISTICS:
                                                                                                                                                                           Query Match 68.7%; Score 15.8; I
Best Local Similarity 89.5%; Pred. No. 45;
Matches 17; Conservative 0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Score 15.8; I
Pred. No. 45;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CLASSIFICATION:
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/392,338
FILING DATE: 22-FEB-1995
PRIOR APPLICATION NUMBER: US 07/989,846
FILING DATE: 20-NOV-1992
PRIOR APPLICATION NUMBER: US 07/96,936
FILING DATE: 25-NOV-1991
FILING DATE: 25-NOV-1991
ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                  332 TGCTGAAAGGCTCTACTTC 350
                                                                                                                                                                                                                                                                     4 TGCTGAAAGCCTCGACTTC 22
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89.5%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             LENGTH: 738 base pair:
TYPE: nucleic acid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          COMPUTER READABLE FORM:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Since
CITY: Mac.
STATE: D.C.
COUNTRY: U.S.A.
TTP: 20005
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Best Local Similarity
         STRANDEDNESS: L
TOPOLOGY: both
FEATURE:
                                                                              ; NAME/KEY:
; LOCATION:
US-09-166-093-22
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ; LOCATION:
US-09-172-019-22
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                                                                                                                                                                                                                                                                                                                                                           Length 738;
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APPLICANT: Wood, James F.
APPLICANT: Wood, James F.
APPLICANT: Hardman, Karl
APPLICANT: Hardman, Karl
APPLICANT: Filpula, David
APPLICANT: Filpula, David
APPLICANT: Rollence, Michelle
APPLICANT: Starne, Kessler, Goldstein & Fox P.L.L.C.
STREET: 1100 New York Avenue, NW
                                                                                                                                                                                                                                                                                                                                                                                                      2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/09/166,093
FILING DATE: Herewith
                                                                                                                                                                                                                                                                                                                                                      Score 15.8; DB 3;
Pred. No. 45;
0; Mismatches 2;
REFERENCE/DOCKET NUMBER: 0977.003000C
TELECOMMUNICATION INFORMATION:
TELEPHONE: (202) 371-2600
TELEPAX: (202) 371-2540
INFORMATION FOR SEQ ID NO: 22:
SEQUENCE CHARACTERISTICS:
LENGTH: 738 base pairs
TYPE: nucleic acid
STRANDEDNESS: both
FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CLASSIC CATAINS INTEGRATION CLASSIC CATAINS APPLICATION IN THE STATE APPLICATION IN THE STATE APPLICATION IN THE STATE APPLICATION NUMBER: US 07/989,846 FILING DATE: 20-N0V-1992 PRIOR APPLICATION NUMBER: US 07/96,936 FILING DATE: 25-N0V-1991 APPLICATION NUMBER: US 07/796,936 ATTORNEY/AGENT INFORMATION: NAME: GOLDStein, JORGE A. REGISTRATION NUMBER: 29,021 REFERENCE/DOCKET NUMBER: 0977.003000B TELECOMMUNICATION INFORMATION: TELECOMMUNICATION INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Sequence 22, Application US/09166093
Patent No. 6027725
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              332 TGCTGAAAGGCTCTACTTC 350
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                                                                                                                                                                                                                                                                                                                                                         Query Match
Best Local Similarity 89.5%;
                                                                                                                                                                                                                                                                                                                                                                                                   17; Conservative
                                                                                                                                                                                                                                                                   cos
1..726
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                U.S.A.
                                                                                                                                                                                                                                                              ; NAME/KEY:
; LOCATION:
US-09-166-750-22
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 RESULT 8
US-09-166-093-22
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              COUNTRY:
                                                                                                                                                                                                                                                                                                                                                                                                      Matches
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APPLICANT: Whillow, Marc
APPLICANT: Whillow, Marc
APPLICANT: Wood, James F.
APPLICANT: Hardman, Karl
APPLICANT: Bird, Rarl
APPLICANT: Bird, Robert
APPLICANT: Filpula, David
TITLE OF INVENTION: Multivalent Antigen-Binding Proteins
NUMBER OF SEQUENCES: 23
CORRESPONDENCE ADDRESS:
ADDRESSE: Sterne, Kessler, Goldstein & Fox P.L.L.C.
STREET: 1100 New York Avenue, NW
CITY: Washington
STATE: D.C.
COUNTRY: U.S.A.
  Sequence 13, Application PC/TUS9311138
Sequence 13, Application PC/TUS9311138
APPLICANT: Enzon, Inc.
TITLE OF INVENTION: Linker For Linked Fusion Polypeptides
NUMBER OF SEQUENCES: 14
CORRESPONDENCE ADDRESS:
ADDRESSEE: Sterne, Kessler, Goldstein & Fox
STREET: 1100 New York Avenue, N.W.
CITY: Washington
                                                                                                                                                                                                                                                                           COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
COMPUTER: SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: PCT/US93/11138
FILING DATE: Herewith
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 07/980,529
FILING DATE: 20-NOV-1992
PRIOR APPLICATION NUMBER: US 08/002,845
FILING APPLICATION NUMBER: US 08/002,845
FILING DATE: 15-JAN-1993
ATTORNY AGENT INFORMATION:
NAME: Goldstein, Jorge A.
REGISTRATION NUMBER: 29,021
REFERENCE/DOCKET NUMBER: 29,021
REFERENCE/DOCKET NUMBER: 0977.2006604/JAG
TELECOMMUNICATION INFORMATION:
TELECOMMUNICATION INFORMATION:
TELECHONE: (202) 371-2500
TELEPHONE: (202) 371-2500
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Pred. No. 45; ; Mismatches
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Ouery Match 68.7%;
Best Local Similarity 89.5%;
Matches 17; Conservative
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                                                                                                                                                                                                                                                                                                                                                                                                                                         FILING DATE: HO
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ; LOCATION:
PCT-US93-11138-13
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                                                                                                                                                                                                                                                                                                    APPLICANT: Hardman, Karl
APPLICANT: Blid, Robert
APPLICANT: Filpula, David
APPLICANT: Follence, Michelle
APPLICANT: Rollence, Michelle
TITE OF INVENTION: Multivalent Antigen-Binding Proteins
CORRESPONDENCE ADDRESS:
    Indels
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1100 New York Avenue, NW
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CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/09/166,094
FILING DATE: Herewith
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APPLICATION DATA:
APPLICATION NUMBER: US 08/392,338
FILING DATE: 22-FEB-1995
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 07/989,846
FILING DATE: 20-NOV-1992
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 07/796,936
FILING DATE: 25-NOV-1991
ATTORNEY/AGENT INFORMATION:
NAME: GOLGStein, JORGS A.
RECISTRATION NUMBER: 29,021
REFERENCE/DOCKET NUMBER: 0977.003000A
TELEPHONE: (202),371-2600
  0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        0; Mismatches
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Pred. No. 45;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
CMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
                                                                                                                                                                                          Sequence 22, Application US/09166094
Patent No. 6121424
GENERAL INFORMATION:
                                                               332 TGCTGAAAGGCTCTACTTC 350
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       INFORMATION: (202) 371-2600
INFORMATION FOR SEQ ID NO: 22:
SEQUENCE CHARACTERISTICS:
LENGTH: 738 here
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                                          4 TGCTGAAAGCCTCGACTTC 22
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89.5%;
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Wood, James F.
Hardman, Karl
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nucleic acid
EDNESS: both
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Query Match
Best Local Similarity 89.5
Matches 17; Conservative
17; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Washington
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STREET: 11
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US-09-166-094-22
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RESULT 11

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Length 738;

DB 5;

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DB 3; Length 744;
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APPLICANT: Wood, James F.
APPLICANT: Wood, James F.
APPLICANT: Hardman, Karl
APPLICANT: Bird, Robert
APPLICANT: Filpula, Davida
APPLICANT: Filpula, Davida
TITLE OF INVENTION: Multivalent Antigen-Binding Proteins
NUMBER OF SEQUENCES: 23
ADDRESSEE: Sterne, Kessler, Goldstein & Fox P.L.L.C.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      2; Indels
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CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/09/166,093
FILING DATE: Herewith
APPLICATION NUMBER: US 08/392,338
FILING DATE: 22-FEB-1995
PRIOR APPLICATION NUMBER: US 07/989,846
FILING DATE: 20-NOV-1992
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 07/96,936
FILING DATE: 25-NOV-1991
ATORNEY/AGENT INFORMATION:
NAME: GOLdstein, Jorge A.
REGISTRATION NUMBER: 29,021
REGISTRATION NUMBER: 29,021
RECISCOMMUNICATION INFORMATION:
TELECOMMUNICATION INFORMATION:
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89.5%; Pred. No. 45;
:1ve 0; Mismatches
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PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/392,338
FILING DATE: 22-EBB-1995
PRIOR APPLICATION NUMBER: US 07/989,846
FILING DATE: 20-NOV-1992
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 07/796,936
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CITY: Washington STATE: D.C.
COUNTRY: U.S.A.
COMPUTER READABLE FORM:
MEDIUM TYPE: FLORMS
COMPUTER: IBM PC COMPALIBLE
COMPUTER: IBM PC COMPALIBLE
COMPUTER: IBM PC COMPALIBLE
COMPATING SYSTEM: PC-DOS/MS-DOS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            E: Sterne, Kessler, Gold
1100 New York Avenue, NW
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                                                                                                                                                                                                                                                                    : LUEPHONE: (202) 371-2600
: TELEFAX: (202) 371-2600
: INFORMATION FOR SEQ ID NO: 12: SEQUENCE CHARACTERISTICS:
LENGTH: 744 base pairs
TYPE: nucleic acid
STRANDEDNESS: both
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         332 TGCTGAAAGGCTCTACTTC 350
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                4 TGCTGAAAGCCTCGACTTC 22
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Matches 17; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                          TOPOLOGY:
FEATURE:
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US-09-166-750-12
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CITY: Wa
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APPLICANT: Filpula, David
APPLICANT: Filpula, David
APPLICANT: Filpula, David
APPLICANT: Filpula, David
TITLE OF INVENTION: Methods for Producing Multivalent Antigen-Binding
TITLE OF INVENTION: Proteins
NUMBER OF SEQUENCES: 23
CORRESPONDENCE ADDRESS:
ADDRESSEE: Sterne, Kessler, Goldstein & Fox P.L.L.C.
STREET: 1100 New York Avenue, NW
CITY: Washington
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COMPUTER READABLE FURM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOGTWARE: Patentin Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/392,338A
FILING DATE: 22-FEB-195
CLASSIFICATION: 435
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 07/989,846
FILING DATE: 20-NOV-1992
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 07/796,936
FILING DATE: 25-NOV-1991
ATORNEY/AGENT INFORMATION:
NAME: GOLGSTEIN, JOSGE A.
REFERENCE/DOCKET NUMBER: 29,021
REFERENCE/COCKET NUMBER: 0977.0030007
TELECOMMUNICATION INFORMATION:
TELECOMMUNICATION INFORMATION:
TELECOMMUNICATION OF SEQ 1D NO: 12:
SEQUENCE CHARACTERISTICS:
LENGTH: 744 base pairs
TYPE: nucleic acid
STRANDEDNESS: both
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CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/09/166,750
FILING DATE: Herewith
CLASSIFICATION:
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MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
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US-09-166-750-12
; Sequence 12, Application US/09166750
; Patent No. 6025165
; GENERAL INFORMATION:
APPLICANT: Whitlow, Marc
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       332 TGCTGAAGGCTCTACTTC 350
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Best Local Similarity 89.5%;
Matches 17; Conservative
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Wood, James F.
Hardman, Karl
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Sequence 12, Application US/09172019
Sequence 12, Application US/09172019
Sequence 12, Application US/09172019
Sevence 12, Application US/09172019
Septematorial Mittow, Marc
APPLICANT: Whitlow, Marc
APPLICANT: Bird, Robert
APPLICANT: Antipula, David
TITLE OF INVENTION: Antipen-Binding Proteins (As Amended)
TITLE OF INVENTION: Antipen-Binding Proteins (As Amended)
CORRESPONDENCE ADDRESS:
ADDRESSEE: Sterne, Kessler, Goldstein & Fox P.L.L.C.
STREET: 1100 New York Avenue, NW
CITY: Washington
STATE: D.C.
COMPUTER: Blook Of States (Assign States)
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
FILING DATE: Herewith
CLASSIFICANTON:
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FRIDKS APPLICATION DATA:

APPLICATION NUMBER: US 08/392,338

FILING DATE: 22-FEB-1995

FRICH APPLICATION DATA:

APPLICATION NUMBER: US 07/989,846

FILING DATE: 20-NOV-1992

PRIOR APPLICATION NUMBER: US 07/796,936

FILING DATE: 25-NOV-1991

ATTORNEY AGENT INFORMATION:

NAME: GOLGATELL, JOTGE A.

REGISTRATION NUMBER: 29,021

RETRERENCE/POCKET NUMBER: 29,021

TELECOMMUNICATION:
FILING DATE: 25-NOV-1991
ATTORNEY AGENT INFORMATION:
NAME: GOLDStein. JORGA
REGISTRATION NUMBER: 29,021
REFERENCE/DOCKET NUMBER: 0977.003000B
TELECOMNUINCATION INFORMATION:
TELEPHONE: (202) 371-2600
INFORMATION FOR SEQ ID NO: 12:
SEQUENCE CHARACTERISTICS:
LENGTH: 744 base pairs
TERNIT: 744 base pairs
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TELEFAX: (202) 371-2540
INFORMATION FOR SEQ ID NO: 12:
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Best Local Similarity 89.55
Matches 17; Conservative
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NAME/KEY:

LOCATION:

US-09-166-093-12
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Sequence 3226, Application US/09864761
Patent No. US20020048763A1
GENERAL INFORMATION:
APPLICANT: Penn, Sharron G.
APPLICANT: Rank, David R.
APPLICANT: Hanzel, David K.
APPLICANT: Chen, Wensheng
TITLE OF INVENTION: HUMAN GENOME-DERIVED SINGLE EXON NUCLEIC ACID PROBES USEFUL FO TITLE OF INVENTION: GENE EXPRESSION ANALYSIS BY MICROARRAY
0 US-09-954-456-552

0 US-09-880-107-1612

US-09-922-2130-6

0 US-09-972-2130-6

0 US-09-878-574-3603

0 US-09-878-574-3603

0 US-09-878-570-10265

US-10-074-095-868

0 US-09-764-860-867

0 US-09-764-860-867

0 US-09-910-913-11

US-09-925-299-98

0 US-09-925-299-98

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0 US-09-925-299-98

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0 US-09-844-43-139

0 US-09-812-844-139

0 US-09-812-844-139
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10 US-09-795-686-1
10 US-00-01
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| Publication No. US20030054531A1
| GENERAL INFORMATION:
| APPLICANT: Gretarsdottir, Solveig
| APPLICANT: Jonsdottir, Sift
| APPLICANT: Feynisdottir, Sigridur Th.
| APPLICANT: Feynisdottir, Sigridur Th.
| TILLE OF INVENTION: HUMAN STROKE GENE
| FILE REFERENCE: 2345.2010-003
| CURRENT APPLICATION NUMBER: US/10/067,514
| CURRENT FILING DATE: 2002-04-04
| PRIOR APPLICATION NUMBER: US 09/811/352
| PRIOR PILING DATE: 2001-03-19
| WINDHER OF SEQ ID NOS: 84
| SOFTWARE: FastSEQ for Windows Version 4.0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Pred. No. 38;
0; Mismatches
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86.4%; Pred. No. 38
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Best Local Similarity 86.4'
Matches 19; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1186
1186
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1579
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LENGTH: 1691139
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; ORGANISM: Human
US-10-067-514-1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     RESULT 2
US-09-864-761-3226
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           $\bar{\pi}$$\\ \approx \\ \approx
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Sequence 1326, Ap
Sequence 155, App
Sequence 165, App
Sequence 665, App
Sequence 5, Appli
Sequence 5, Appli
Sequence 1, Appli
                                                                                                                                                                                                                                                                                                    (without alignments)
239.539 Million cell updates/sec
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                                                                                                                                                                                                                                                                 June 12, 2003, 01:27:04 ; Search time 134.381 Seconds
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       /GGDZ_6/ptodata/2/pubpna/USO7_PUBCOMB.seq:*
/GGDZ_6/ptodata/2/pubpna/PCT_NEW_PUB.seq:*
/GGDZ_6/ptodata/2/pubpna/USO6_NEW_PUB.seq:*
/GGDZ_6/ptodata/2/pubpna/USO6_NEW_PUB.seq:*
/GGDZ_6/ptodata/2/pubpna/USO6_NEW_PUB.seq:*
/GGDZ_6/ptodata/2/pubpna/DCTUS_PUBCOMB.seq:*
/GGDZ_6/ptodata/2/pubpna/USO8_NEW_PUB.seq:*
/GGDZ_6/ptodata/2/pubpna/USO8_NEW_PUB.seq:*
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/GGDZ_6/ptodata/2/pubpna/USO9_NEW_PUB.seq:*
/GGDZ_6/ptodata/2/pubpna/USO9_USUGOMB.seq:*
//GGDZ_6/ptodata/2/pubpna/USO0_PUBCOMB.seq:*
//GGDZ_6/ptodata/2/pubpna/USO0_PUBCOMB.seq:*
//GGDZ_6/ptodata/2/pubpna/USO0_PUBCOMB.seq:*
                               GenCore version 5.1.6
Copyright (c) 1993 - 2003 Compugen Ltd.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        870385 seqs, 699768693 residues
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Maximum Match 100%
Listing first 45 summaries
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                                                                                                                                                                                         nucleic search, using sw model
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         IDENTITY_NUC Gapop 10.0 , Gapext 1.0
                                                                                                                                                                                                                                                                                                                                                                                                           US-09-674-195C-18
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Minimum DB seq length: 0
Maximum DB seq length: 200000000
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Match Length DB
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Gaps

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Sequence 3, Appli Sequence 1, Appli Sequence 3, Appli Sequence 3, Appli Sequence 536, App Sequence 271, App Sequence 19, Appl

US-09-938-842A-536 US-09-770-445-271 US-10-165-603-19

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US-09-985-442-3 US-09-983-580-3

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Result Š Appli

Length 1691139;

Sequence 139, App Sequence 10873, A Sequence 28, Appl Sequence 602, App Sequence 1, Appl Sequence 1, Appl

Sequence 552, App Sequence 1612, Ap Sequence 1612, Ap Sequence 3603, Ap Sequence 6410, Ap Sequence 868, App Sequence 868, App Sequence 867, App Sequence 867, App Sequence 967, App Sequence 98, App Sequence 98, Appl Sequence 25, Appl Sequence 25, Appl Sequence 25, Appl Sequence 25, Appl

and

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APPLICANT: Noy, Paul H.

APPLICANT: Roy, Paul H.

APPLICANT: Roy, Paul H.

TITLE OF INVENTION: Specific, Genus-Specific and Universal DNA
TITLE OF INVENTION: Probes and Amplification Primers to Rapidly Detect and
TITLE OF INVENTION: Associated Antibiotic Resistance Genes from
TITLE OF INVENTION: Associated Antibiotic Resistance Genes from
FILE REFERENCE: 12287.29
CURRENT APPLICATION NUMBER: US/09/989,643
CURRENT FILING DATE: 2001-11-20
PRIOR PLING DATE: EARLIER PILING DATE: 1999-05-09
PRIOR PELING DATE: EARLIER FILING DATE: 1996-11-04
NUMBER OF SEQ ID NOS: 174
SOFTWARE: PATENTING DATE: EARLIER FILING DATE: 1996-11-04
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TITLE OF INVENTION: Methods For Monitoring Multiple Gene
TITLE OF INVENTION: Methods For Monitoring Multiple Gene
TITLE OF INVENTION: Expression
FILE REFERENCE: 10085.500.0S
CURRENT PEPLICATION NUMBER: US/09/974,300
CURRENT FILING DATE: 2001-10.05
PRIOR FILING DATE: 2000-10.06
PRIOR FILING DATE: 2000-10.06
PRIOR FILING DATE: 2001-03-27
NUMBER OF SEQ ID NOS: 8481
SOFTWARE: FastSEQ for Windows Version 4.0
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85.7%; Pred. No. 76;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Sequence 179, Application US/09974300 Patent No. US20020146721A1 GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       158 ATGCTGAATTCTCGACCTCG 178
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Sequence 665, Application US/09878574 Patent No. US20020110548A1 GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               3 ATGCTGAAAGCCTCGACTTCG 23
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ; ORGANISM: Fibrobacter succinogenes US-09-989-643-155
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ORGANISM: Bacillus licheniformis
ergeron, Michel G.
Picard, Francis J.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Best Local Similarity 85.7
Matches 18; Conservative
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Best Local Similarity
Matches 18; Conserv
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IN BONE MARROW, SIGNAL = 1.3
IN FETAL LIVER, SIGNAL = 1.4
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   HEXPRESSED IN PLACENTA, SIGNAL = 1.5

EXPRESSED IN PLACENTA, SIGNAL = 1.2

EXPRESSED IN BT474, SIGNAL = 1.2

EXPRESSED IN HEAKT, SIGNAL = 1.2

EXPRESSED IN HEAKT, SIGNAL = 1.3

EXPRESSED IN LUNG, SIGNAL = 1.3

EXPRESSED IN HULLOO, SIGNAL = 0.96

EXPRESSED IN BONE MARROW, SIGNAL = 1.3

EXPRESSED IN FETAL LIVER, SIGNAL = 1.3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                NUMBER OF SEQ ID NOS: 49117
SOFTWARE: Annomax Sequence Listing Engine vers. 1.1
SEQ ID NO 3226
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Pred. No. 35;
0; Mismatches
                                        CURRENT FILING DATE: 2001-03-23
PRIOR APPLICATION NUMBER: US 60/180,312
PRIOR PELING DATE: 2000-02-04
PRIOR PELING DATE: 2000-05-26
PRIOR PLING DATE: 2000-06-05
PRIOR PLING DATE: 2000-06-03
PRIOR PLING DATE: 2000-09-04
PRIOR PLING DATE: 2000-09-04
PRIOR PLING DATE: 2000-09-27
PRIOR PLING DATE: 2000-09-27
PRIOR PLING DATE: 2000-09-27
PRIOR PLING DATE: 2001-01-30
PRIOR PLING DATE: 2001-01-30
PRIOR APPLICATION NUMBER: PCT/USO1/00667
PRIOR PLING DATE: 2001-01-30
PRIOR APPLICATION NUMBER: PCT/USO1/00669
PRIOR PLING DATE: 2001-01-30
PRIOR PLING DATE: 2001-01-30
PRIOR APPLICATION NUMBER: PCT/USO1/00669
PRIOR PLING DATE: 2001-01-30
PRIOR PLING DATE: 2000-09-21
PRIOR PLING DATE: 2000-09-21
PRIOR PLING DATE: 2000-09-21
PRIOR PLING DATE: 2000-09-31
                     CURRENT APPLICATION NUMBER: US/09/864,761
CURRENT FILING DATE: 2001-05-23
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              182 CATGCAGAAAGCCTCTACTT 201
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Best Local Similarity 90.0%;
Matches 18; Conservative (
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TYPE: DNA
ORGANISM: Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        OTHER INFORMATION: MAP OTHER INFORMATION: EXPIOTHER INFORMATION: EXPI
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US-09-864-761-3226
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STREET: 1100 NEW YORK AVENUE, SUITE 600 CITY: WASHINGTON
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          FEATURE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         US-09-791-578-5
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TITLE OF INVENTION: Nucleic Acid Molecules and Other Molecules Associated with TITLE OF INVENTION: Plants
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 FILPUGA, DAVID R.
LEE, LIHSYNG S.
TITLE OF INVENTION: POLYALKYLENE OXIDE-MODIFIED SINGLE CHAIN POLYPEPTIDES
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                                                                                                                                                                                                                                                                                                                      Length 310;
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CORRESPONDENCE ADDRESS:
ADDRESSEE: STERNE, KESSLER, GOLDSTEIN & FOX P.L.L.C.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Length 550;
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                                                                                                                                                                                                        TYPE: DNA
CRGANISM: Glycine max
CTHER INFORMATION: Clone ID: LIB3028-047-Q1-B1-H11
US-09-878-574-665
                                                                                                                                                                                                                                                                                                                  Score 15.8; DB 10;
Pred. No. 1.1e+02;
1; Mismatches 4;
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Pred. No. 1.2e+02;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Sequence 838, Application US/09991936
Publication No. US20030073827A1
GENERAL INFORMATION
APPLICANT: Brandt, Revin S.
APPLICANT: Gaines, Patrick J.
APPLICANT: Gaines, Patrick J.
APPLICANT: Gaines, Patrick J.
APPLICANT: History
TITLE OF INVENTION: FLEA HEAD, NERVE CORD, HINDY
TITLE OF INVENTION: NUCLEIC ACID MOLECULES, PRE
FILE REFERENCE: FC -C.1
CURRENT APPLICATION NUMBER: US/09/991,936
CURRENT APPLICATION NUMBER: US/09/543,668
PRIOR FILING DATE: 2000-04-07
PRIOR APPLICATION NUMBER: 60/128,704
PRIOR FILING DATE: 1999-04-09
NUMBER OF SEQ ID NOS: 1959
SOFTWARE PATENT OF NOS: 1959
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         0; Mismatches
                 TITLE OF INVENTION: Plants
FILE REFERENCE: 38-21(15401)B
CURRENT APPLICATION NUMBER: US/09/878,574
CURRENT FILING DATE: 2001-12-21
PRIOR APPLICATION NUMBER: 09/333,535
PRIOR FILING DATE: 1990-06-14
NUMBER OF SEQ ID NOS: 15775
LENGTH: 310
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Patent No. US20020061307A1
GENERAL INFORMATION:
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; ORGANISM: Ctenocephalides fells
US-09-991-936-838
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Best Local Similarity 78.3%;
Matches 18; Conservative
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Best Local Similarity 89.5%;
Matches 17; Conservative
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LENGTH: 550
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Gaps
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STREET: 1100 NEW YORK AVENUE, SUITE 600
CITY: WASHINGTON
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Length 723;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Indels
                                          MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/09/791,578
FILING DATE: 26-Feb-2001
CLASSIFICATION: CURNOW
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Query Match 68.7%; Score 15.8; DB 10;
Best Local Similarity 89.5%; Pred. No. 1.2e+02;
Matches 17; Conservative 0; Mismatches 2;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                REFERENCE/DOCKET NUMBER: 0977.1840002
                                                                                                                                                                                                                                                                                FILING DATE: CURROWNS
APPLICATION NUMBER: US 60/050,472
FILING DATE: 23-JUN-1997
APPLICATION NUMBER: US 60/063,074
FILING DATE: 27-CCT-1997
FILING DATE: 02-DEC-1997
                                                                                                                                                                                                                                   PRIOR APPLICATION DATA:
APPLICATION NUMBER: 09/069,842
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                LOCATION: 1..723
SEQUENCE DESCRIPTION: SEQ ID NO: 5:
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COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC COMPATIBLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            NAME: JORGE A. GOLDSTEIN
REGISTRATION NUMBER: 29,021
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TELECOMMUNICATION INFORMATION:
TELEPHONE: 202-371-2600
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      SHORR, ROBERT G.L. FILPULA, DAVID R. LEE, LIHSYNG S.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Sequence 5, Application US/09791540 Patent No. US20020098192Al GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  332 IGCTGAAAGGCTCTACTTC 350
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                                                                                                                                                                                                                                                                                                                                                                                                                                                        ATTORNEY/AGENT INFORMATION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TELEFAX: 202-371-2540 INFORMATION FOR SEQ ID NO: 5: SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             APPLICANT: WHITLOW, MARC
ZIP: 20005
COMPUTER READABLE FORM:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TYPE: nucleic acid
STRANDEDNESS: both
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WHITLOW, MARC
LEE, LIHSYNG S.
TITLE OF INVENTION: SINGLE-CHAIN ANTIGEN-BINDING PROTEINS
CAPABLE OF GLYCOSYLATION, PRODUCTION AND USES THEREOF
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ADDRESSEE: STERNE, KESSLER, GOLDSTEIN & FOX P.L.L.C.
STREET: 1100 NEW YORK AVE., NW, SUITE 600
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Length 758;
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COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.30

CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Ouery Match 68.7%; Score 15.8; DB 9; Best Local Similarity 89.5%; Pred. No. 1.2e+02; Matches 17; Conservative 0; Mismatches 2;
                                                                                                                                                                              ATTORNEY AGENT INFORMATION:
NAME: KIM, JUDITH U.
REGISTRATION UNDRER: 40,679
REPERENCE/DOCKET NUMBER: 0977.2280003
TELECOMMUNICATION INFORMATION:
TELEPHONE: (202)371-2600
TELEPHONE: (202)371-2540
INFORMATION FOR SEQ ID NO: 1:
SEQUENCE CHARACTERISTICS:
                         PILING DATE: CURKNOWN>
APPLICATION NUMBER: 05 60/063,074
FILING DATE: 27-0CT-1997
APPLICATION NUMBER: US 60/050,472
FILING DATE: 23-0UN-1997
APPLICATION NUMBER: US 60/044,449
FILING DATE: 30-APR-1997
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FILING DATE: 1998-04-30
APPLICATION NUMBER: US 60/063,074
ELLING DATE: 27-0CT-1997
APPLICATION NUMBER: US 60/050,472
FILING DATE: 23-JUN-1997
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          APPLICATION NUMBER: US/09/956,087
FILING DATE: 20-Sep-2001
CLASSIFICATION: <Unknown>
       APPLICATION NUMBER: 09/069,821
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     LOCATION: 1..747
SEQUENCE DESCRIPTION: SEQ ID NO: 1:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       4 TGCTGAAAGCCTCGACTTC 22
                                                                                                                                                                                                                                                                                                                                                                                          LENGTH: 758 base pairs
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SHORR, ROBERT
                                                                                                                                                                                                                                                                                                                                                                                                                                      STRANDEDNESS: both
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                TOPOLOGY: both
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   MOLECULE TYPE: CDNA
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                NAME/KEY:
LOCATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                FEATURE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  US-09-956-086-1
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WANG, MAOLIANG
SHORK, ROBERT
WHITLOW, MARC
LEE, LIHSYNG S.

TITLE OF INVENTION: SINGLE-CHAIN ANTIGEN-BINDING PROTEINS
CAPABLE OF GLYCOSYLATION, PRODUCTION AND USES THEREOF
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ö
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OPERATING SYSTEM: PC-DOS/MS-DOS
SOFFWARE: Patentin Release #1.0, Version #1.30
CURRENT APPLICATION DAIA:
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.30
                                                                                                                                                APPLICATION NUMBER: 09/069,842
FILING DATE: 1998-04-30
APPLICATION NUMBER: US 60/050,472
FILING DATE: 23-JUN-1997
APPLICATION NUMBER: US 60/063,074
FILING DATE: 27-0CT-1997
APPLICATION NUMBER: US 60/067,341
FILING DATE: 02-DEC-1997
ATORNEY/AGENT INFORMATION:
NAME: JORGE A. GOLDSTEIN
REGISTRATION NUMBER: 29,021
REFERENCE/DOCKET NUMBER: 29,021
TELECOMMUNICATION NUMBER: 29,021
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            68.7%; Score 15.8; DB 10;
89.5%; Pred. No. 1.2e+02;
1ve 0; Mismatches 2;
                                                             APPLICATION NUMBER: US/09/791,540 FILING DATE: 26-Feb-2001 CLASSIFICATION: <Unknown>PRIOR APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            APPLICATION NUMBER: US/09/956,086
FILING DATE: 20-Sep-2001
CLASSIFICATION: <Unknown>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  LOCATION: 1..723
; SEQUENCE DESCRIPTION: SEQ ID NO: 5: US-09-791-540-5
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ADDRESSEE: STERNE, KESSLER,
STREET: 1100 NEW YORK AVE.,
CITY: WASHINGTON
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                                                                                                                                                                                                                                                                                                                                                                                                                                                         FELEPHONE: 202-371-2600
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   LENGTH: 723 base pairs
TYPE: nucleic acid
STRANDEDNESS: both
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      4 TGCTGAAAGCCTCGACTTC 22
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            INFORMATION FOR SEQ ID NO: 5: SEQUENCE CHARACTERISTICS:
                                          CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           COUNTRY: USA
ZIP: 20005
COMPUTER READABLE FORM:
MEDIUM TYPE: Flopp)
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 PRIOR APPLICATION DATA
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Matches 17; Conservative
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             FEATURE
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                                             FILPULA, DAVID R.
LEE, LIHSYNG S.
TITLE OF INVENTION: POLYALKYLENE OXIDE-MODIFIED SINGLE CHAIN
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                                                                                                                                                    CORRESPONDENCE ADDRESS:
ADDRESSEE: STERNE, KESSLER, GOLDSTEIN & FOX P.L.L.C.
STREET: 1100 NEW YORK AVENUE, SUITE 600
                                                                                                                                                                                                                                                                                                                                                                                              SOFTWARE: Patentin Release #1.0, Version #1.30
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          3; DB 10;
1.2e+02;
ches 2;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                PRIOR APPLICATION DATA:

APPLICATION NUMBER: 09/069,842
FILING DATE: CURKOWN>
APPLICATION NUMBER: US 60/050,472
FILING DATE: 23-UN-1997
APPLICATION NUMBER: US 60/063,074
FILING DATE: 27-OCT-1997
APPLICATION NUMBER: US 60/067,341
FILING DATE: 02-DEC-1997
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Pred. No. 1.2e
0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                              CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/09/791,578
FILING DATE: 26-Feb-2001
CLASSIFICATION: <Unknown>
                                                                                                                                                                                                                                                                                                                            MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   LOCATION: 1.771
; SEQUENCE DESCRIPTION: SEQ ID NO: 3:
US-09-791-578-3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           NAME: JORGE A. GOLDSTEIN
REGISTRATION NUMBER: 29,021
                                                                                                               POLYPEPTIDES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TELECOMMUNICATION INFORMATION
TELEPHONE: 202-371-2600
TELEFAX: 202-371-2540
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SHORR, ROBERT G.L.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Sequence 3, Application US/09791540 Patent No. US20020098192A1
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LEE, LIHSYNG S.
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SEQUENCE CHARACTERISTICS
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Best Local Similarity 89.5%;
Matches 17; Conservative
    APPLICANT: WHITLOW, MARC
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                                                                                                                                    SECUENCES:
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APPLICANT: Wang, Macliang
APPLICANT: Whitlow, Marc D.
APPLICANT: Whitlow, Marc D.
APPLICANT: Whitlow, Marc D.
BILE REPERENCE: 0977.230003
CURRENT APPLICATION NUMBER: US/09/985,442
CURRENT FILING DATE: 1099-110-02
PRIOR APPLICATION NUMBER: 09/420,592
PRIOR FILING DATE: 1999-10-19
PRIOR FILING DATE: 1999-10-20
NUMBER OF SEQ ID NOS: 13
SOFTWARE: Patentin Ver. 2.1
SEQ ID NO
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Pred. No. 1.2e+02;
                                                                    NAME: KIM, JUDITH U.
REGISTRATION NUMBER: 40,679
REFERENCE/DOCKET NUMBER: 0977.2280003
TELECOMMUNICATION INFORMATION:
TELEPHONE: (202)371-2600
APPLICATION NUMBER: US 60/044,449 FILING DATE: 30-APR-1997 ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                   SEQUENCE DESCRIPTION: SEQ ID NO: 1:
US-09-956-087-1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Sequence 3, Application US/09791578
Patent No. US20020061307A1
GENERAL INFORMATION:
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Patent No. US20020156248A1
GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  332 TGCTGAAAGGCTCTACTTC 350
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INFORMATION FOR SEQ ID NO: 1:
SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TYPE: DNA
ORGANISM: Artificial Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Query Match
Best Local Similarity 89.5%;
Matches 17; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Query Match 68.7%;
Best Local Similarity 89.5%;
Matches 17; Conservative
                                                                                                                                                                                                                                                                   TYPE: nucleic acid
STRANDEDNESS: both
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             APPLICANT: Filpula, David R.
                                                                                                                                                                                                                                                                                                            TOPOLOGY: both
MOLECULE TYPE: CDNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ; LOCATION: (1)..(771)
US-09-985-442-1
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APPLICANT: Filpula, David R.
APPLICANT: Filpula, David R.
APPLICANT: Filpula, Macliang
APPLICANT: Wang, Macliang
APPLICANT: Wang, Macliang
APPLICANT: Wang, Macliang
APPLICANT: Wallow, Marc D.
TITLE OF INVENTION: 0. US20020156248Alel Method for Targeted Delivery of Nucleic
FILE REFERENCE: 0977.2300003
CURRENT APPLICATION NUMBER: 05/420,592
PRIOR PILING DATE: 1999-10-19
PRIOR PILING DATE: 1999-10-19
PRIOR FILING DATE: 1999-10-20
NUMBER OF SEQ ID NOS: 13
SOFTWARE: PatentIn Ver. 2.1
                                                                                                                                                                                                                                                                              Gaps
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                                                                                                   OTHER INFORMATION: Description of Artificial Sequence: CC49/218 sFv
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                                                                                                                                                                                                                     68.7%; Score 15.8; DB 10;
89.5%; Pred. No. 1.2e+02;
tive 0; Mismatches 2;
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Pred. No. 1.2e+02;
0; Mismatches 2;
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                                   TYPE: DNA ORGANISM: Artificial Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TYPE: DNA
ORGANISM: Artificial Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Query Match 68.7%;
Best Local Similarity 89.5%;
Matches 17; Conservative
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Best Local Similarity 89.5
Matches 17; Conservative
                                                                                                                           ; NAME/KEY: CDS
; LOCATION: (1)..(771)
US-09-983-580-1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ; NAME/KEY: CDS
; LOCATION: (1)..(807)
US-09-985-442-3
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LENGTH: 818
                LENGIH: 782
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                                                                                   FEATURE:
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Patent No. US20020151061A1
GENERAL INFORMATION:
GENERAL INFORMATION:
GENERAL INFORMATION:
GENERAL INFORMATION:
GENERAL INFORMATION:
GENERAL INFORMATION:
APPLICANT: Wang, Macliang
APPLICANT: Whitlow, Marc D.
FILE REPERENCE: 0977, 2300020
CURRENT APPLICATION NUMBER: US/09/983,580
CURRENT FILING DATE: 2001-10-25
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CORRESPONDENCE ADDRESS:
ADDRESSEE: STERNE, KESSLER, GOLDSTEIN & FOX P.L.L.C. STREET: 1100 NEW YORK AVENUE, SUITE 600 CITY: WASHINGTON STATE: DC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Length 782
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Indels
                                                                                                                                                                                                     COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.30
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Query Match 68.7%; Score 15.8; DB 10;
Best Local Similarity 89.5%; Pred. No. 1.2e+02;
Matches 17; Conservative 0; Mismatches 2;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ATTORNEY/AGENT INFORMATION:
NAME: JORGE A. GOLDSTEIN
REGISTRATION NUMBER: 29,021
REFERENCE/DOCKET NUMBER: 0977.1840002
                                                                                                                                                                                                                                                                                                                                                                                  APPLICATION NUMBER: 09/069,842
FILING DATE: 1988-04-30
APPLICATION NUMBER: US 60/050,472
APPLICATION NUMBER: US 60/063,074
FILING DATE: 23-07-1997
APPLICATION NUMBER: US 60/063,341
FILING DATE: 02-DEC-1997
                                                                                                                                                                                                                                                                     CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/09/791,540
FILING DATE: 26-Feb-2001
CLASSIFICATION: <u >cunknown></u>
PRIOR APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ; NAME/KEY: CDS
; LOCATION: 1.771
; SEQUENCE DESCRIPTION: SEQ ID NO: 3:
US-09-791-540-3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      PRIOR APPLICATION NUMBER: 09/420,592
PRIOR FILING DATE: 1999-10-19
PRIOR APPLICATION NUMBER: 60/104,949
PRIOR FILING DATE: 1998-10-20
NUMBER OF SEQ ID NOS: 13
SOFTWARE: Patentin Ver. 2.1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TELECOMMUNICATION INFORMATION: TELEPHONE: 202-371-2600
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LENGTH: 782 base pairs
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INFORMATION FOR SEQ ID NO: 3:
                                                                                                                                       ZIP: 20005
COMPUTER READABLE FORM:
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STRANDEDNESS: both
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      MOLECULE TYPE: CDNA FEATURE:
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Title: Perfect score:

Run on:

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Scoring table:

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Coccidioides immitis.

Coccidioides immitis.

Coccidioides immitis.

Coccidioides immitis.

Coccidioides immitis.

Eukaryota; Fungi; Ascomycota; Pezizomycotina; Eurotiomycetes;

Onygenales; mitosporic Onygenales; Coccidioides.

Onygenales; mitosporic Onygenales; Coccidioides.

Onygenales; mitosporic Onygenales; Coccidioides.

Onygenales; mitosporic Onygenales; Coccidioides.

NRE Generation of ESTs from Coccidioides immitis spherule cDNA library

NT Contact: Malcolin J. Gardner

Department of Eukaryotic Genomics

The Institute for Genomic Research

The Instit
                                                                                                                                                                                                                                                             BF252135 EST41846
BF251385 EST41846
BF251061 EST41858
BF251060 EST418219
AL432995 T3 end of
AL43299 T3 end of
AL434639 T3 end of
AL434926 T3 end of
AL434926 T3 end of
AL434926 T3 end of
AL431761 T3 end of
AL431761 T3 end of
AL431761 T3 end of
AL43300 T7 end of
AL433909 T7 end of
AL43390 T7 end of
AL431909 T7 end of
AL43199 W9607all
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EST445666
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/db_xref="taxon:5501"
/clone="CIAAK37"
/clone_lib="Coccidioides immitis spherule cDNA library"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ALIGNMENTS
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CNSO76RF
CNSO79X1
CNSO77XC
CNSO77XC
CNSO76VJ
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AA784878
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GenCore version 5.1.6
Copyright (c) 1993 - 2003 Compugen Ltd.
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                                                                                                                                                                                                                                                                                                                                                                                     16154066 seqs, 8097743376 residues
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23
1 dcatgctgaagcctcgacttcg 23
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Listing first 45 summaries
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Coccidioides immitis.

Coccidioides immitis.

Coccidioides immitis.

Coccidioides immitis.

Eukaryota; Fungi; Ascomycota; Pezizomycotina; Eurotiomycetes;

Conygenales; mitosporic Onygenales; Coccidioides.

I (bases i to 377)

Cardonr, M.J. and Kirkland, T.

Generation of ESTS from Coccidioides immitis spherule cDNA library

Generation of ESTS from Coccidioides immitis spherule cDNA library

Contact: Malcolm J. Gardner

Department of Eukaryotic Genomics

Toli soft Genomic Research

The Institute for Genomic Research

Toli 301 838 3519

Fax: 301 838 529

Fax: 301 838 529

Fax: 301 838 529

Fax: 302 838 520

Coccidioides immitis"

Abone-"Lib-"Coccidioides immitis spherule cDNA library"

Aclone-"Enhance Coccidioides immitis spherule cDNA library"

Ade_stage="spherule"

Abone-"SolR"

A
Gardner, M.J. and Kirkland, T.

Gardner, M.J. and Kirkland, T.

Generation of ESTs from Coccidioides immitis spherule cDNA library
Generation of ESTs from Coccidioides immitis spherule cDNA library
Contact: Malcolm J. Gardner
Contact: Malcolm J. Gardner
Department of Eukaryotic Genomics
Department of Eukaryotic Genomics
Department of Eukaryotic Genomics
Department of Eukaryotic Genomics
The Institute for Genomic Research
9712 Medical Center Drive, Rockville, MD 20850, USA
9712 Medical Center Drive, Rockville, MD 20850, USA
Tel: 301 838 3519
Fax: 301 838 0208
Email: gardner@tigr.org.
Cotanical Coccidioides immitis "
Corganism - Coccidioides immitis spherule cDNA library"
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1; Mismatches 2; Indels
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Best Local Similarity 87.0%;
Matches 20; Conservative
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Best Local Similarity 87.0%;
Matches 20; Conservative
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Xhol*
                                 /dev_stage="spherule"
/lab_host="SOLR"
/note="Vector: pBluescript SK(-); Site_1: EcoRl; Site_2:
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Coccidioides immitis
Eukaryota; Fungi; Ascomycota; Pezizomycotina; Eurotiomycetes;
Onygenales; mitosporic Onygenales; Coccidioides.
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Pred. No. 77;
1; Mismatches 2; Indels
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Best Local Similarity 87.0%;
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Coccidioides immitis
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Best Local Similarity 87.0%;
Matches 20; Conservative 1
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RESULT 3 BF251811

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BASE COUNT

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AW792005
D00948-R Lambda Zap, Stratagene Blumeria graminis f. sp. hordel
D00948-R Lone D00948 similar to non-functional folate binding protein,
MRNA sequence.
AW792005
AW792005.1 GI:13903602
                                            1. .391
Abaref="taxon:5501"
Ab_xref="taxon:5501"
Ab_xref="taxon:5501"
Aclone="CIAAK57"
Aclone="Coccidioides immitis spherule cDNA library"
Adev_stage="spherule"
Aba_host="sour"
Aba_host="sour"
Anote="vector: pBluescript SK(-); Site_1: EcoR1; Site_2:
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Blumeria graminis f. sp. hordei
Eukaryora, Fungil Ascomycota; Pezizomycotina; Leotiomycetes;
Erysiphales; Erysiphaceae; Blumeria.
1 (bases 1 to 486)
Thomas,S.W., Rasmussen,S.W., Glaring,M.A., Rouster,J.A. and Oliver
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Gene identification in the fungal pathogen Blumeria graminis by expressed sequence tag analysis

Expressed sequence tag analysis

Onpublished (2000)

Contact: Rasmussen, S.W.

Department of Yeast Genetics

Carlsberg Laboratory

Tel: 45 3327 5230

Fax: 45 3327 4766
                                                                                                                                                                                                                                                                                                  Gaps
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/clone="D00948"
/clone_lib="rambda Zap, Stratagene"
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                                                                                                                                                                                                                                             Query Match 82.6%; Score 19; DB Best Local Similarity 87.0%; Pred. No. 82; Matches 20; Conservative 1; Mismatches
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101 c 115 g 132 t
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High quality sequence stop: 486
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/organism="Blumeria
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1 (bases in 1 or 378)

1 (bases in 1 or 378)

2 Gardner, M.J. and Kirkland, T.

Generation of ESTs from Coccidioides immitis spherule cDNA library Contact: Malcolm J. Gardner

Department of Exaryotic Genomics
The Institute for Genomic Research

712 Medical Center Drive, Rockville, MD 20850, USA

Fel: 301 838 6208

Email: gardner@tigr.org.

Location/Qualifiers

Free
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Coccidioides immitis.
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Coccidioides immitis.
Coccidioides immitis.
Coccidioides immitis.
Coccidioides.
Corporates; mitosporic Onygenales; Coccidioides.
Corporates, M. and Kirkland, T. Generation of ESTs from Coccidioides immitis spherule cDNA library Context: Nalcolim J. Gardner Context: Nalcolim J. Gardner Department of Eukaryotic Genemics
The Institute for Genomic Research
9712 Medical Center Drive, Rockville, MD 20850, USA
Fax: 301 838 3519
                                                                                                                    BF251967
378 bp mRNA linear EST 15-NOV-2001
EST419229 Coccidioides immitis spherule cDNA library Coccidioides
immitis_cDNA clone CIAAP18 5' sequence, mRNA sequence.
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SPA18910 Coccidioides immitis spherule cDNA library Coccidioides immitis cDNA coccidioides immitis cDNA clone CIAAK57 5' sequence, mRNA sequence.
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/clone='ClAAAP18'
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/lab_host="SOLR"
/note="Vector: pBluescript SK(-); Site_1: EcoR1; Site_2:
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BF251967.1 GI:16932110
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BF251561.1 GI:16931792
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Coccidioides immitis
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Local Similarity 87.0%;
les 20; Conservative
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EST418899 Coccidioides immitis spherule cDNA library Coccidioides immitis cDNA clone CIAAK45 5' sequence, mRNA sequence.

BF251715
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DO1189-R Lambda Zap, Stratagene Blumeria graminis f. sp. hordei
CDNA clone DO1189 similar to non-functional folate binding protein,
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Blumeria graminis f. sp. hordel
Blumeria graminis f. sp. hordel
Bukaryota; Fungl; Ascomycota, Pezizomycotina; Leotiomycetes;
Erysiphales; Erysiphaceae; Blumeria.
1 (Dases 1 to 515)
Thomas, S.W., Rasmussen, S.W., Glaring, M.A., Rouster, J.A. and Oliver
/note-"Vector: pBluescript SK(-); Site_1: EcoR1; Site_2:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  VR.P. To dentification in the fungal pathogen Blumeria graminis by expressed sequence tag analysis Unpublished (2000) Contact: Rasmussen.S.W. Department of Yeast Genetics
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Coccidioides immitis
Eukaryota; Fungi; Ascomycota; Pezizomycotina; Eurotiomycetes;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  /organism="Blumeria graminis f. sp. hordei"
/db.xref="taxon:62688"
/clone="D01189"
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10 Gl. Carlabergvej, DK-2500, Copenhagen, Denmark
Tel: 45 3327 5230
                                                                                                                                    Indels
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/cell_type="conidia"
/lab_host="Hordeum vulgare"
104 c 119 g 142 t
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1; Mismatches 2
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AW792430.1 GI:13904027
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milarity 87.0%;
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Local Similarity 87.0%;
nes 20; Conservative
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BF251715
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Coccidioides immitis.

Coccidioides immitis

Coccidioides immitis

Eukaryota; Fungi; Ascomycota; Pezizomycotina; Eurotiomycetes;

Eukaryota; Fungi; Ascomycota; Pezizomycotina; Eurotiomycetes;

Onygenales; mitosporic Onygenales; Coccidioides.

I (bases 1 to 502)

Garder, M.J. and Kirkland, T.

Garder, M.J. and Kirkland, T.

Garder, M.J. Conform Coccidioides immitis spherule cDNA library

L Onpublished (2000)

L Contact: Malcolm J Gardner

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Tel: 301 838 3519

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EST419843 Coccidioides Lamitis spherule cDNA library Coccidioides lamitis con mRNA sequence.
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Eukariotices immittes
Eukariotices immittes
Onygenales; mitosporic Onygenales; Coccidioldes.

1 (bases 1 to 488)
Gardner, m.J. and Kirkland, T.
Generation of ESTs from Coccidioldes immitis spherule cDNA library
Unpublished (2000)
Contact: Malcolm J. Gardner
Department of Eukaryotic Genomics
The Institute for Genomic Research
The Institute for Genomic Research
Tel: 301 838 0208
Fax: 301 838 0208
Fax: 301 838 0208
                                                                                                                                                                                                                                                                                                                                                                              Email: gardheretigr.org.
Location/Qualifiers
1. 048
/organism="coccidioides immitis"
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/lab_host="spherile"
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/lab_host="SolR"
    EST418888 Coccidioides immitis spherule cDNA library Coccidioides immitis cDNA clone CIAAK33 5' sequence, mRNA sequence.
BF251704
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Pred. No.
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Location/Qualifiers
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Best Local Similarity 87.0%;
Matches 20; Conservative
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DEST419356 Coccidioides immitis spherule cDNA library Coccidioides immitis cDNA library coccidioides BF252094
                                                                                                                                                       BF253171 546 bp mRNA linear EST 15-NOV-2001 EST445666 Coccidioides immitis spherule cDNA library Coccidioides immitis cDNA clone CIGAB68 5' sequence, mRNA sequence.
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1 (bases 1 to 567)
Gardner, M.J. and Kirkland, T.
Generation of ESTs from Coccidioides immitis spherule cDNA library Unpublished (2000)
Contact: Malcolm J. Gardner
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Coccidionies immitts
Eukaryota; Fungi; Ascomycota; Pezizomycotina; Eurotiomycetes;
Ongenales; mitosporic Onygenales; Coccidionies.

1 (bases 1 to 546)
Gardner, M.J. and Kirkland, T.
Generation of ESTS from Coccidionies immitts spherule cDNA library
Unpublished (2000)
Other_ESTS: EST445665
Contact: Malcolm J. Gardner
Department of Eukaryotic Genomics
The Institute for Genomic Research
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The Institute for Genomic Research
712 Medical Center Drive, Rockville, MD 20850, USA
Tel: 301 838 3319
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Fax: 301 838 0208
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Pred. No. 1e+02;
1; Mismatches 2
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    Location/Qualifiers
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Best Local Similarity 87.0%;
Matches 20; Conservative
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E 1 (bases 1 to 541)
Charles; mitosporic Onygenales; Coccidioides.

S Gardner, M.J. and Kirkland, T.
Generation of ESTs from Coccidioides immitis spherule cDNA library
L Unpublished (2000)
Contact: Malcolm J. Gardner
Department of Eukaryotic Genomics
The Institute for Genomic Research
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Tel: 301 838 3519
Fax: 301 838 0208
Email: gardner@tigr.org.
Onygenales; mitosporic Onygenales; Coccidioides.

1 (Dases 1 to 518)

S Gardner, M.J. and Kirkland, T.
Generation of ESTS from Coccidioides immitis spherule cDNA library
L Unpublished (2000)

Contact: Malcolm J. Gardner
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Tel: 301 838 3519
Fax: 301 838 0208
Email: gardner@tigr.org.
Location/Qualifiers
1. 518
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Pred. No. 1e+02;
1; Mismatches 2; Indels
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Eukaryota; Fund; Ascomycota; Pezizomycotina; Eurotiomycetes; Onygenales; mitosporic Onygenales; Coccidioides.

1 (bases it to 568)

2 Gardner, M.J. and Kirkland, T.

3 Gardner, M.J. and Kirkland, T.

4 Unpublished (2000)

L. Onpublished (2000)

Contact: Malcolm J. Gardner

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9712 Medical Center Drive, Rockville, MD 20850, USA

Tel: 301 838 3519

Fax: 301 838 0208

Email: gardner@tigr.org.

Location/Qualifiers

1. 568

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Email: gardner@tigr.org.
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160 ACATGCTAAAAACCTCGACTTCG 182

1 DCATGCTGAAAGCCTCGACTTCG 23

9 9

Search completed: June 12, 2003, 04:35:07 Job time : 845.943 secs

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GenCore version 5.1.6
Copyright (c) 1993 - 2003 Compugen Ltd.
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OM nucleic - nuc	OM nucleic - nucleic search, using sw model
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Title: Perfect score:	US-09-674-195C-19
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em_htgo_hum: * em_htgo_mus: * em_htgo_other: * em_htg_hum:*
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Pred. No. is the number of results predicted by chance to have a

score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Description	275306 H. capsulatu X58572 H. capsulatu AF320009 Ajellomyc AB030015 Aspergill AF08822 Teloschis AF107145 Dibaeis b AF107145 Dibaeis b AF107145 Dibaeis b AF10717 Amiger (1strational AB0030017 Aspergill AF113710 Siphula p AF08473 Dibaeis b AF13713 Dibaeis b AF13710 Siphula p AF08473 Dibaeis b AF084137 Dibaeis b AF08413 Dibaeis b AF084137 Dibaeis b AF08413 Dibaeis b AF08572 Kirschate AB008413 Aspergillus D6369 Aspergillus AB003006 Aspergillus AB003045 Fenicilli A4003046 Physconia AB003045 Physconia AB004694 Endophyte AB046948 Endophyte AF062662 Endophyte AF062662 Endophyte	linear PLN 10-DEC-1999 subunit ribosomal RNA. tina; Eurotiomycetes; e,O. and Sonntag,H.G. m var. duboisii and var.
DB ID	## HCC18SRRN ## HCF18SRRN ## AF32000 ## AF030916 ## AF030916 ## AF030916 ## AF030916 ## AF030916 ## AF030917 ## AF045438 ## AF045438 ## AF045438 ## AF137112 ## AF113710 ## AF008473 ## AF008473 ## AF008397 ## AF003947 ## AF003946 ## AF003946 ## AF033726 ## AF033479 ## AF003947 ## AF003946 ## AF033479 ## AF033489 ## AF046948 ## AF062664 ## AF062664 ## AF062664 ## AF062665	1704 bp DNA sii 185 rRNA gene rRNA gene; small ycota; Pezizomyco ; Ajellomyces. akikhani, S., Nolt oplasma capsulatu
	2.6 98.3 1704 2.6 98.3 1704 2.6 98.3 1704 2.1 91.3 1713 2.1 91.3 1713 2.1 91.3 1667 2.1 91.3 1678 2.1 91.3 1687 2.1 91.3 1687 2.1 91.3 1687 2.1 91.3 1721 2.1 91.3 1721 2.1 91.3 1721 2.1 91.3 1772 2.1 91.3 1772 2.1 91.3 1772 2.1 91.3 1774 2.1 91.3 1777 2.	HCC18SRN H.Capsulatum ssp. duboi 275306 275306 275306.1 GI:1419549 88 ribosomal RNA; 18S Ajellomyces capsulatus. Ajellomyces capsulatus Eukaryota; Fungi, Ascom Onygenales; Onygenaceae 1 (bases 1 to 1704) Okeke, C. N., Kappe, R., Z Ribosomal genes of Hist farciminosum
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H. Capsulatum ssp. farciminosum 18S rRNA gene.
ON 275307.
Z75307.
Z75307.
Z75307.
Z75307.
GI:419550
S Ajellomyces capsulatus
ISM Ajellomyces capsulatus
Eukaryota; Fungi, Ascomycota; Pezizomycotina; Eurotiomycetes;
Onygenales; Onygenaceae; Ajellomyces.
I (bases) 1 to 1704)
S Ribosomal genes of Histoplasma capsulatum var. duboisil and var.
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                                E 2 (bases 1 to 1704)

S Rape, R.
S Rape, R.
S Direct Submission
L Submitsted (06-JUL-1996) Reinhard Kappe, Hygiene & Med.
L Submitsted (06-JUL-1996) Reinhard Kappe, Hygiene Institute, Im Microbiology, University of Heidelberg, Bygiene Institute, Im Neuenhelmer Feld 324, Heidelberg, D-69120, Germany
L Coation/Qualifiers
1. 1704
//Organism="Ajellomyces capsulatus"
//sub_apecies="duboisil"
//db_aref="taxon:5037"
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11arity 73.9%; Pred. No. 0.74;
Conservative 6; Mismatches 0; Indels 0;
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| Strain="C182505" 35, C1824'8:64"
|sub_apecies="farciminosum"
| db_xref="taxon:5037"
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a 364 c 471 g 437 t
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/gene="18S rRNA"
/product="18S rlbosomal RNA"
/product="18S rlbosomal RNA"
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99114487
41 (9-10), 355-362 (1998)
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/gene="18s rRNA"
1. .1704
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Best Local Similarity 73.99
Matches 17; Conservative
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    Mycoses 4
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AF-320009 1726 bp DNA 11near PLN 13-FEB-2001
Ajellomyces capsulatus ATCC26032 18S ribosomal RNA gene, partial
sequence.
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Submitted (19-Mar-1991) B.H. Bowman, Roche Molecular Systems, 1145
Stlantic Avenue, Alameda CA 94501, USA
2 (bases 1 to 1713)
Bowman, B.H., Taylor, J.W. and White, T.J.
Molecular evolution of the fungi: human pathogens
Mol. Biol. Evol. 9 (5), 893-904 (1992)
                         PLN 30-JUN-1993
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 3 (bases 1 to 1713)
Berbee,M.L. and Taylor,J.W.
Convergence in ascospore discharge mechanism among pyrenomycete fungi based on 185 ribosomal RNA gene sequence Mol. Phylogenet. Evol. 1 (1), 59-71 (1992)
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Eukaryota; Fungl. Ascomycota; Pezizomycotina; Eurotiomycetes;
Eukaryota; Fungl. Ascomycota; Pezizomycotina; Eurotiomyces;
Onygenales; Onygenaceae; Ajellomyces.

1 (bases 1 to 1726)
Kasudar, T., White, T.J. and Taylor, J.W.
The Molecular Clock in Fungl in the Class Plectomycetes
Unpublished
                                                                                                                                                    Ajellomyces capsulatus.
Ajellomyces capsulatus
Eukaryota; Fung1; Ascomycota; Pezizomycotina; Eurotiomycetes;
Eukaryota; Pung1; Ascomycota; Pezizomycotina; Eurotiomycetes;
I (bases 1 to 1713)
Bowman, B.H.
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H-capsulatum DNA for 18S ribosomal RNA, partial. X58572.845469 X58572.1 GI:2759 RS ribosomal RNA.
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Unpublished
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AF113712
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Eukaryotas, Fungi, Ascomycota; Pezizomycotina; Eurotiomycetes;

Eurotiales; Trichocomaceae; mitosporic Trichocomaceae; Aspergillus.

1 (Abase I to 494)

Shintani, T. and Matsumoto, Y.

Aspergillus niger gene for 18S rRNA, partial sequence

Published Only in DataBase (1999)

2 (Abase I to 494)

Shinteni, T. and Matsumoto, Y.

Direct Submission
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             Kasuga, T., White, T.J. and Taylor, J.W.
Direct Submission
Submitted (07-NOV-2000) Roche Molecular Systems, 1145 Atlantic
Ave., Alameda, CA 94501, USA
Location_Valifiers
1. 1726
/organism="ArcC256032; G2178"
/db_xref="ArcC26032"
/db_xref="ArcC26032"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Submitted (10-A0G-1999) Tomoyoshi Shintani, Industrial Research Center of Ehime Prefecture, Laboratory of Food Process, 487-2 Kumekubota, Matsuyama, Ehime 791-1101, Japan (E-mail:shintani@iri.pref.ehime.jp, URL:www.iri.pref.ehime.jp, Tel:81-89-976-7612, Fax:81-89-976-7313)
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                                                                                                                                                                                                                                                                 Score 22.6; DB 8; Length 1726;
Pred. No. 0.75;
6; Mismatches 0; Indels n
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Aspergillus niger gene for 18S rRNA, partial sequence.
ABO30916
                                                                                                                                                                       /note="class 2 North American population"
<1. >1726
/product="18s ribosomal RNA"
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69.6%; Pred. No. 4.9;
Live 6; Mismatches
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a 100 c 121 g 131 t
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Aspergillus niger (strain:IEF1) DNA.
Aspergillus niger
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/db_xref="taxon:5061"
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131 ACATGCTGAAAGCCTCGACTTCG 153
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149 ACATGCTGAAAACCTCGACTTCG 171
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Best Local Similarity 73.9%;
Matches 17; Conservative
   (bases 1 to 1726)
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Best Local Similarity
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Dibacis bacomyces small subunit ribosomal RNA gene, partial
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Evolutionary relationships of nonsexual lichenized fungi: molecular phylogenetic hypotheses for the genera Siphula and Thamnolia from and LSU rDNA analyses
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Platt,J.L. and Spatafora,J.W.
Direct Submission
Submitted (16-DEC-1998) Department of Botany & Plant Pathology, Oregon State University, 2082 Cordley Hall, Corvallis, OR 97331-2902, USA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Gaps
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Eukaryota; Fungi; Ascomycota; Pezizomycotina; Lecanoromycetes;
Lecanoromycetes incertae sedis; Icmadophilaceae; Dibaeis
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                                                                                                                                                                                                                                                                                                                                                    /specimen_voucher="Feige & Mies Ess-6640 (US)"
/db_xref="taxon:88650"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            8; Length 786;
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189 c 243 g 268 t 1 oth
                                                                                                                                                                                                                                                                                                                                                                                                                                      /note="small subunit ribosomal RNA"
161 c 198 g 219 t

    . 969
    /organism="Dibaeis baeomyces"
    /db_xref="taxon:83478"

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Pred. No. 5.1;
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112 ACATGCTGAAAACCTCGACTTCG 134
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AF088252.1 GI:4731142
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AF113712
AF113712.1 GI:6502558
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nes 16; Conservative
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Length 969;

91.3%; Score 21; DB 8;

Query Match

Gaps

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Aspergillus niger var. awamori (strain:IEF2) DNA.
Aspergillus niger var. awamori (strain:IEF2) DNA.
Aspergillus niger var. awamori (strain:IEF2) DNA.
Aspergillus awamori
Eukaryota; Fungi; Ascomycota; Pezizomycotina; Eurotiomycetea;
Eurotiales; Trichocomaceae; mitosporic Trichocomaceae; Aspergillus.
Eurotiales; Trichocomaceae; mitosporic Trichocomaceae; Aspergillus.
Eurotiales; Trichocomaceae; mitosporic Trichocomaceae; Aspergillus.
Shintani,T. and Matsumoto,Y.
Aspergillus awamori gene for 18S rRNA, partial sequence
Ly Louisehed Only in DataBase (1999)
E (bases I to 1054)
E Shintani,T. and Matsumoto,Y.
Direct Submission
Submitted (10-Aug-1999) Tomoyoshi Shintani, Industrial Research
Center of Ehime Prefecture, Laboratory of Food Process; 487-2
Kumekubota, Matsuyama, Ehime 791-1101, Japan
(E-mail:shintani@iti.pref.ehime.jp, URL:www.iri.pref.ehime.jp,
Tel:81-89-976-7612, Fax:81-89-976-7313)
Location/Qualifiers
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                                                                                                                                                                                                                                                                                                                                                                                  Length 1031;
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Amylocarpus encephaloides small subunit rRNA gene.
U45438
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                                                             7. 1031
/organism="Cyclaneusma minus"
/strain="93197"
/specific_host="Pinus sylvestris"
/db_xref="taxon:64355"
| -1 ->1031
/product="small subunit ribosomal RNA"
5 a 203 c 264 g 289 t
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/strain="IEF2"
/db_xref="taxon:105351"
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288 a 215 c 274 g 277 t
                                                                                                                                                                                                                                                                                                                                                                                  Score 21; DB 8; Pred. No. 5.2; 6; Mismatches
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                              Location/Qualifiers
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Best Local Similarity 69.6%;
Matches 16; Conservative
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Best Local Similarity 69.6%;
Matches 16; Conservative
97331-2902, USA
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Dibaeis baeomyces small subunit ribosomal RNA gene, partial
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Eukaryota; Fungl; Ascomycota; Pezizomycotina; Lecanoromycetes; Lecanoromycetes incertae sedis; Icmadophilaceae; Dibaeis. 1 (bases 1 to 990) Platt, J. . Camacho, F. J. and Spatafora, J. W. Evolution of the lichen symbiosis within the Leotiales; molecular phylogenetic hypotheses for Dibaeis and Baeomyces
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Eukaryota; Fungi; Ascomycota; Pezizomycotina; Leotlomycetes; Rhytismatales; Rhytismataceae; Cyclaneusma.

I (bases 1 to 1031)
Gernandt, D. 8.

Holst-Jensen, A., Hamelin, R.C. and Kohn, L.M.

Holst-Jensen, A., Hamelin, R.C. and Kohn, L.M.

Phylogenetics of Helotiales and Rhytismatales based on partial small subunit nuclear ribosomal DNA sequences

Mycologia 93 (5), 915-933 (2001)

Carnandt, D. S., Platt, J.L., Stone, J.K., Spatafora, J.W.,

Holst-Jensen, A., Hamelin, R.C. and Kohn, L.M.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Unpublications
2 (bases 1 to 990)
2 (bases 1 to 980)
Platt, J.L. and Spatafora, J.W.
Direct Submission
Submitted (18-NOV-1998) Botany & Plant Pathology, Oregon State University, 2082 Cordley Hall, Corvalits, OR 9731, USA
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Cyclaneusma minus small subunit ribosomal RNA gene, partial
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Pred. No. 5.1;
6; Mismatches
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/organism="Dibaeis baeomyces"
/isolate="0SC56400"
/db_xref="taxon:83478"
                 69.6%; Pred. No. 5.1; ive 6; Mismatches
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106 ACATGCTGAAAACCTCGGTTCG 128
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Best Local Similarity 69.6%;
Matches 16; Conservative
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Cyclaneusma minus
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Matches 16; Conserv
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source

FEATURES

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RESULT 8 AF107345

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ACCESSION KEYWORDS

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ð 8 ACCESSION VERSION KEYWORDS SOURCE TITLE JOURNAL

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Aspergillus niger.
Aspergillus niger.
Eukaryotta; Fungi; Ascomycota; Pezizomycotina; Eurotiomycetes;
Eukaryotta; Fungi; Ascomycota; Pezizomycotina; Eurotiomycetes;
Eurotiales; Trichocomaceae; mitosporic Trichocomaceae; Aspergillus.
1 (bases I to 1673)
Melchers, W.J., Verweij, P.E., van den Hurk, P., van Beikum, A., De Pauw, B.E., Hoogkamp-Korstanje, J.A. and Meis, J.F.
General primer-mediated PCR for detection of Aspergillus species
J. Clin. Microbiol. 32 (7), 1710-1717 (1994)
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                                                                                                                                                                                                                                                                                                                                                                                 Direct Submission
Submitted (25-MAR-1994) W.J.G. Melchers, Department of Medical
Microbiology, University of Nijmegen, P O Box 9101, 6500 HB
Nijmegen, NETHERLANDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Eukaryota; Fung1; Ascomycota; Pezizomycotina; Burotiomycetes;
Eurotiales; Trichocomaceae; mitosporic Trichocomaceae;
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Zakikhani,S., Okeke,C.N. and Kappe,R.
18S rDNa sequence of Paecilomyces variotii CBS339.51
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1. 1678

1. 7organism="Paecilomyces variotil"
/strain="CBS339.51"
/isolate="Man, sputum"
/db_xref="taxon:45996"
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/product="185 ribosomal RNA"
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Paecilomyces variotii 18S rRNA gene.
Y13996
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/evidence=experimental
363 c 467 g 426 t
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Pred. No. 5.4;
6; Mismatches
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1. 1673
7. crganism="Aspergillus n
/isolate="CBS102.12"
/db_xref="taxon:5061"
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18S ribosomal RNA; 18S rRNA gene.
Paecilomyces varictii.
Paecilomyces varictii.
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Pred. No.
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365 c 458 g
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Best Local Similarity 69.6%;
Matches 16; Conservative 6
                                                                                                                                                                                                                                                                                                                                 2 (bases 1 to 1673)
Melchers, W. J. G.
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           18S ribosomal RNA.
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Siphula ceratites 18S small subunit ribosomal RNA gene, complete
sequence.
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1 (bases 1 to 1648)
Stenroos, S., Lohtander, K. and Tehler, A.
Direct Submission
Submitted (27-SEP-1996) Botany, National Museum of Natural History, Smithsonian Institution, NHB-166, 10th St. & Constitution Ave., Washington, DC 20560, USA
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Eukaryota; Fungl; Ascomycota; Pezizomycotina; Leotiomycetes; Helotiales; Helotiales incertae sedis; Amylocarpus.

1 (bases in 1479)
Landvik,S., Shailer,N.F.J. and Eriksson,O.E.
SSU rDNA sequences support for a close relationship between the Elaphomycetales and the Eurotiales and Onygenales
Mycoscience 37, 237-241 (1996)
Landvik,S., Shailer,N.F.J. and Eriksson,O.E.
                                                                                                                                                                                                                                             Direct Submission
Submitted (11-JAN-1996) Sara Landvik, Ecological Botany, Umea,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Gaps
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/strain="UME 29765"
/db_xref="taxon:45428"
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X78538
X78538.1 GI:469079
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Pred. No. 5.3;
6; Mismatches

    10. 1648
    7 organism="Siphula ceratites"
    7 db_xref="taxon:53373"

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88 ACATGCTGAAAACCTCGACTTCG 110
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Gaps

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Dibaeis bacomyces.
Dibaeis bacomyces
Eukaryota: Fungi: Ascomycota; Pezizomycotina; Lecanoromycetes;
Lecanoromycetes incertae sedis; Icmadophilaceae; Dibaeis.
1 (bases 1 to 1686)
Platt, J.L. and Spatafora, J.W.
Evolutionary relationships of nonsexual lichenized fungi: molecular phylogenetic hypotheses for the genera Siphula and Thamnolia from Oppublished
                                                                                                                                                                 1686 bp DNA linear PLN 06-DEC-1999 Discrete bacomyces isolate OSC53939 small subunit ribosomal RNA AF113713
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Platt,J.L. and Spatafora,J.W.
Direct Submission
Submitted (16-DEC-1998) Department of Botany & Plant Pathology,
Oregon State University, 2082 Cordley Hall, Corvallis, OR
97331-2902, USA
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Post-processing: Minimum Match 0% Maximum Match 100% Listing first 45 summaries Database :

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Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

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ALIGNMENTS

RESULT 1

Probe; detection; Histoplasma capsulatum; 185; rRNA; rDNA; hybridisation; Saccharomyces cerevisiae; fungus; phylogenetic; helper probe; soil; water; Blastomyces dermatitidis; quantitation; sample; body fluid; ss. Histoplasma capsulatum-specific DNA hybridisation probe. AAQ73433 standard; DNA; 22 BP. 91US-0720587. 91US-0720587. 18-MAY-1995 (first entry) (GENP-) GEN-PROBE INC. 28-JUN-1991; 28-JUN-1991; US5352579-A. 04-OCT-1994. Milliman CL; Synthetic. AAQ73433;

Hybridisation probe specific for Histoplasma capsulatum - allowing differentiation from all other fungi for detection or

WPI; 1994-316178/39.

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Sequence 22 BP; 5 A; 7 C; 5 G; 5 T; 0 other;
fluids, tissue samples, soil and water.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       A probe (AAQ73433) or its complement (AAQ73436) and corresponding RNA sequences (AAQ73437 and AAQ86436) used for the specific detection of all strains of Histoplasma capsulatum (H.c.). The probes are manufactured complementary to the H.c. 189 rNN or rDNA gene. This region also corresponds to the bases 172-193 of Saccharomyces cerevisiae 185 rRNA. The probe is specific for H.c. and can be used to distinguish the fungus from all others, even its nearest phylogenetic neighbour Blastomyces dermatitidis. Nucleic acid hybridisation of the specific probe is enhanced by the use of helper probes (AAQ73434-5). This method allows the detection and/or the quantitation of H.c. from samples e.g. body
                                                                             A probe (AAQ73433) or its complement (AAQ73436) and corresponding RNA sequences (AAQ73437 and AAQ86436) used for the specific detection of all strains of Histoplasma capsulatum (H.c.). The probes are manufactured complementary to the H.c. 182 RRNA or rDNA gene. This region also corresponds to the bases 172-193 of Saccharomyces cerevisiae 185 RRNA. The probe is specific for H.c. and can be used to distinguish the fungus from all others, even its nearest phylogenetic neighbour Blastomyces dermatitidis. Nucleic acid hybridisation of the specific probe is enhanced by the use of helper probes (AAQ73434-5). This method allows the detection and/or the quantitation of H.c. from samples e.g. body fluids, tissue samples, soil and water.
                                                                                                                                                                                                                                                                                                                                                                                                                                               Gaps
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                                                                                                                                                                                                                                                                                                                                                                                              Ouery Match 95.7%; Score 22; DB 15; Length 22; Best Local Similarity 77.3%; Pred. No. 0.16; Matches 17; Conservative 5; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                       Sequence 22 BP; 5 A; 5 C; 7 G; 5 T; 0 other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         2 CAUGCUGAAAGCCUCGACUUCG 23
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 22 CATGCTGAAAGCCTCGACTTCG 1
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                                            Claim 4; Column 11; 8pp; English.
quantitation in body fluids, etc.
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         Length 22;
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                                                               0; Indels
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100.0%; Pred. No. 0.16;
11ve 0; Mismatches 0;
Ouery Match

95.7%; Score 22; DB 15;
Best Local Similarity 77.3%; Pred. No. 0.16;
Matches 17; Conservative 5; Mismatches 0;
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Best Local Similarity luv...
Best Local 22; Conservative
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us-09-674-195c-19.rng

Aspergillus niger. WO200056762-A2 99US-0273623.

22-MAR-1999;

22-MAR-2000; 2000WO-US07781

28-SEP-2000,

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                                                                                                                                                          Probe; detection; Histoplasma capsulatum; 185; rRNA; rDNA; hybridisation;
Saccharomyces cerevisiae; fungus; phylogenetic; helper probe; soil;
water; Blastomyces dermatitidis; quantitation; sample; body fluid; ss.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         A probe (AAQ73433) or its complement (AAQ73436) and corresponding RNA sequences (AAQ73437 and AAQ86436) used for the specific detection of all strains of Histoplasma capsulatum (H.c.). The probes are manufactured complementary to the H.c. 188 rRNA or rDNA gene. This region also corresponds to the bases 172-193 of Saccharomyces cerevisiae 185 rRNA. The probe is specific for H.c. and can be used to distinguish the fungus from all others, even its nearest phylogenetic neighbour Blastomyces dermatitidis. Nucleic acid hybridisation of the specific probe is enhanced by the use of helper probes (AAQ73434-5). This method allows the detection and/or the quantitation of H.c. from samples e.g. body
                                                                                                                     Histoplasma capsulatum-specific complementary RNA hybridisation probe.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ch 95.7%; Score 22; DB 15; Length 22; 1 Similarity 77.3%; Pred. No. 0.16; 17; Conservative 5; Mismatches 0; Indels
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AAQ86436/c
ID AAQ86436 standard; RNA; 22 BP.
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                                                                                                                                                                                                                               Synthetic.
                                                       AAQ86436;
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The present invention describes a method for monitoring differential expression of genes in a first filamentous fungal (FF) cell relative to expression of the same genes in one or more second filamentous fungal cells. The method uses fluorescence-labeled nucteic acids isolated from the FF cells and a substrate of expressed sequence tags (EST). The ESTS of are used in the methods for monitoring differential expression of genes in a first filamentous fungal (FF) cell relative to expression of the complex of genes in one or more second filamentous fungal cells. Monitoring the glasowered, possible functions of unknown open reading frames can be contitled and gene copy number variation and stability can be discovered, possible functions of unknown open reading frames can be completed. The expression of genes can be used to study how FF cells discovered. The expression of genes can be used to study how FF cells continued from conditions, environmental stress, spore continued to changes in culture conditions, environmental stress, spore of morphogenesis, recombination, metabolic or catabolic pathway confined confined confined the confined confi
                                                                                                                                                                                                                                                                       Monitoring differential expression of genes in filamentous fungal celluses fluorescence-labeled nucleic acids isolated from the cells and a substrate of expressed sequence tags .
                                                                                                                                           Olsen PB;
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                                                                                                                                       Clausen IG,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              91.3%; Score 21; DB 21; Length 568; 69.6%; Pred. No. 0.75;
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                                                                                                                           Shuster JR, Kauppinen S,
                                                                                                                                                                                                                                                                                                                                                                                                                               Claim 87; Page 1791-1792; 3161pp; English.
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(NOVO ) NOVO NORDISK BIOTECH INC (NOVO ) NOVO NORDISK AS.
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                                                                                                                                                                                                 WPI; 2000-594572/56.
                                                                                                                       Berka RM, Rey MW,
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Best Local Similarity
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16-FEB-1998; 6-FEB-1998;

19-AUG-1999

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The invention relates to isolated polynucleotide (I) and polypeptide (II) sequences. (I) is useful as hybridisation probes, polymerase chain reaction (PCR) primers, oilgomers, and for chromosome and gene mapping, and in recombinant production of (II). The polynucleotides are also used in diagnostics as expressed sequence tags for identifying expressed genes. (I) is useful in gene therapy techniques to restore normal activity of (II) or to treat disease states involving (II). Is useful for generating antibodies against it, detecting or quantitating a polypeptide in tissue, as molecular weight markers and as
                                                                                                                                                                               The present invention relates to a new microbe of Acinetobacter or Burkholderis genus producing aldonic acid and oxidiaing specifically the hemiacetal hydroxy group of a saccharide having said hydroxy group. Aldonic acid is used as a mineral reinforcing agent. The present sequence was used to illustrate the present invention.
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                                                                          A new microbe for producing aldonic acid, comprises a new strain of Acinetobacter or Burkholderis -
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Human; chromosome mapping; gene mapping; gene therapy; forensic; food supplement; medical imaging; diagnostic; genetic disorder; ss.
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                                                                                                                                                                                                                                                                                                                                                   Score 17.8; DB 24; Length 1745;
Pred. No. 36;
5; Mismatches 3; Indels 0;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        145 ACATGCTAAAACCCCGACTTCG 167
                                                                                                                                               Disclosure; Page 17; 22pp; Japanese.
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                                                                                                                                                                                                                                                                                                                                                              77.48;
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23-AUG-2000; 2000US-0649167
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Best Local Similarity 65.4.
Best Local 5; Conservative
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           WPI; 2001-639362/73
P-PSDB; ABG01127.
                                      WPI; 2002-002933/01
(OSAQ ) OSAKA CITY.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        (HYSE-) HYSEQ INC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                WO200175067-A2.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           RESULT 8
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        This invention describes a novel method for detecting Aspergillus nucleic acid (I) in a body sample which comprises the isolation of (I) followed two-step polymerase chain reaction (PCR) amplification of any nucleic acid having a sequence essentially homologous to part of the 3'-end of the Aspergillus 185 rRNA gene using primers used in the first step that do not overlap with those in the second step. The method is used for early diagnosis, and monitoring, of aspergillosis, particularly invasive infections in hematological-oncological patients with long-term suppression of the immune system. Unlike the Known method using overlapping primers, this process provides efficient and reliable detection of Aspergillus in clinical situations. It is specific for Aspergillus (it detects the species terreus, niger, versicolor, clavatus, flausquas, and funiquatus, but not oryzae, nor bacteria or fungi from any other genera). This sequence represents the DNA sequence of Aspergillus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ö
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                                                                                                                                                                                                                                                                                                                                                                                     Detecting Aspergillus nucleic acid in body samples by two-step
polymerase chain reaction, for diagnosing aspergillosis
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Pred. No. 5.5;
6; Mismatches
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                                                                                                                                                                                                                                                                                                        Skladny H;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                131 ACATGCTAAAACCTCGACTTCG 153
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65.2%;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Local Similarity 65.2
les 15; Conservative
    Aspergillus fumigatus
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                                                                                                                                                                                                                     (BUCH/) BUCHHEIDT D (HEHL/)' HEHLMANN R.
                                                                                                                                                                                                                                                           SKLA/) SKLADNY H.
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                                               DE19806274-A1
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                11-SEP-2001.
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Query Match

Matches

ABA01152;

ABA01152 RESULT

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Gaps

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Indels

Length 4403765;

Sequence 4403765 BP; 757105 A; 1447799 C; 1441301 G; 757371 T; 189 other;

/ Match 74.8%; Score 17.2; DB 22; Local Similarity 72.7%; Pred. No. 1.5e+02; les 16; Conservative 3; Mismatches 3;

Query Match

X.OS

Matches

172071 CATGGTGAAAGCCTCGACAGCG 172050

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2 CAUGCUGAAAGCCUCGACUUCG 23

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a food supplement. (II) and its binding partners are useful in medical imaging of sites expressing (II). (I) and (II) are useful for treating disorders involving aberrant protein expression or biological activity. The polypeptide and polynucleotide sequences have applications in diagnostics, forensics, gene mapping, identification of mutations responsible for genetic disorders or other traits to assess biodiversity and to produce other types of data and products dependent on DNA and amino acid sequences. AAS64197-AAS94564 represent novel human diagnostic coding sequences of the invention.

Note: The sequence data for this patent did not appear in the printed specification, but was obtained in electronic format directly from WIPO
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               The invention relates to evaluating strain variation within and between different populations of the tuberculosis bacterial pathogen, Mycobacterium by determining the nucleotide sequence of the first strain at positions in the complete sequence of the genome that correspond to positions that differ in the uncleotide sequences of M. tuberculosis strains CDC 1551 (AA199683) and H37Rv (AA199682). The method is useful for evaluating strain variation of M. tuberculosis and has valuable application in the fields of tuberculosis genetics, epidemiology, patient treatment and epidemic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Evaluating strain variation of Mycobacterium tuberculosis, comprises determining the nucleotide sequence of the strain at positions in the genome corresponding to positions where M. tuberculosis strains CDC 1551 and H37Rv differ
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                                                                                                                                                                                                                                                                                                  DB 23; Length 492;
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                                                                                                                                                                                                                                                          Sequence 492 BP; 134 A; 115 C; 142 G; 101 T; 0 other;
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Pred. No. 49;
6; Mismatches
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ID AAI99683 standard; DNA; 4403765 BP
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Best Local Similarity 61.9%;
Matches 13; Conservative
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Mycobacterium tuberculosis.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   15-JAN-2002
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Note: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format directly from USPTO at seqdata.uspto.gov/sequence.html?DocID=6294328B1.
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                                                                                                                                                                                  Mycobacterium tuberculosis; strain H37Rv; strain CDC 1551; genome; variation; epidemiology; patient treatment; epidemic monitoring; ds.
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                                                                                                                                           Mycobacterium tuberculosis strain H37Rv genome SEQ ID NO 1.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                Venter JC;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Query Match 74.8%; Score 17.2; DB 22; Best Local Similarity 72.7%; Pred. No. 1.5e+02; Matches 16; Conservative 3; Mismatches 3;
                                                                                                                                                                                                                                                                                                                                                                                                                                                              Fraser CM,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      171902 CATGGTGAAAGCCTCGACAGCG 171881
                                  AAI99682 standard; DNA; 4411529 BP.
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                                                                                                           (first entry)
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                                                                      AA199682;
                 AA199682/c
RESULT 10
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Note: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format directly from USPTO at seqdata.uspto.gov/sequence.html?DocID=6294328B1.

monitoring.

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ABA44550;

ABA44550

Human;

09-AUG-2001

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Human; foetal liver; gene expression; single exon nucleic acid probe; ss.
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                                                                                                                                                                                                     Human foetal liver single exon nucleic acid probe #3302
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   BP.
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ABA54997 standard; DNA; 454
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Best Local Similarity
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27-SEP-2000;
04-OCT-2000;
                                                                                                                                                                                                                                                                                                                                           Homo sapiens,
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   NAME OF COLOR OF STREET OF
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Š
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      from human breast and BT 474 cells. The method involves contacting the probes with a collection of detectably labelled nucleic acids derived from human breast and BT 474 cells. The method involves contacting the probes with a collection of detectably labelled nucleic acids derived from mRNA of human breast, and then measuring the label bound to each probe of the microarray. The probes are useful for verifying the expression of regions of genomic DNA predicted to encode proteins. They are useful for assessing breast disease. Gene expression analysis is useful for assessing the toxicity of chemical captures of probes for measuring gene expression, with far less bias than expressed sequence tag microarrays. The method is suitable for rapid production of functional information from genomic sequence. The present sequence is a single exon nucleic acid probe of the invention. Note: The sequence data for this patent did not form part of the notified specification, but was obtained in electronic format directly
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ö
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              useful for measuring gene expression in sample derived from human
breast, comprises number of single exon nucleic acid probes
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               New spatially-addressable set of single exon nucleic acid probes,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ö
                                                                                                                                                                                                                                                                                                                                               microarray; single exon probe; gene expression; breast;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              DB 22; Length 454;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Claim 1; SEQ ID NO 3245; 327pp + sequence listing; English.
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                                                                                                                                                                                                                                                                            duman breast cell single exon nucleic acid probe #3245.
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Mismatches
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Chen W, Rank DR;
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                                                                          ABA44550 standard; DNA; 454 BP.
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31-SEP-2000; 2000US-0632366.
21-SEP-2000; 2000US-0234687.
27-SEP-2000; 2000US-0236559.
04-OCT-2000; 2000GS-0024263.
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nes 14; Conservative
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                                                                                                                                                                                                                                                                                                                                                                                      disease; cancer; ss.
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Indels

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Homo sapiens.

Query Match

Best Loca Matches

ö g RESULT 12 ABA54997

03-AUG-2000;

04-FEB-2000; 30-JUN-2000;

26-MAY

09-AUG-2001

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probes which are derived from genomic sequences expressed in the human brain. They can be used to measure gene expression in brain cell samples, which may enable the diagnosis and improved treatment of nervous system diseases such as Alzheimer's disease, multiple sclerosis, schizophrenia, epilepsy and cancers. The present sequence is one of the probes of the
                                                                                                                                                                                                                                          Single exon nucleic acid probes for analyzing gene expression in human brains -
                                                                                                                                                                                                                                                                                                                                     The present invention provides a number of single exon nucleic acid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Human; bone marrow expressed exon; gene expression analysis; probe; microarray; cancer; leukaemia; lymphoma; myeloma; ss.
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                                                                                                                                                                                                                                                                                              Example 4; SEQ ID NO: 3257; 650pp + Sequence Listing; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Human bone marrow expressed single exon probe SEQ ID NO: 3276.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Length 454;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Sequence 454 BP; 135 A; 84 C; 120 G; 115 T; 0 other;
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4; Mismatches
                                                                                                                                                                   Chen W, Rank DR;
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                                                                                                                             (MOLE-) MOLECULAR DYNAMICS INC
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                                                   21-SEP-2000; 2000US-0234687.
27-SEP-2000; 2000US-0236359.
04-OCT-2000; 2000GB-0024263.
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2000GB-0024263.
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2000US-0632366
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Matches 14; Conservative
                                                                                                                                                                   Hanzel DK,
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                 30-JUN-2000;
03-AUG-2000;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       measuring human gene expression in a sample derived from human heart. The present sequence is one such probe. The probes may be used for predicting, measuring and displaying gene expression in samples derived from the human heart via microarrays. By measuring gene expression, the probes are useful for predicting, diagnosing, grading, staging, monitoring and prognosing diseases of the human heart and vascular system e.g. cardiovascular disease, hypertension, cardiac arrhythmias and congenital heart disease.

Note: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format directly from WIPO
                                                                                                                                                                                                                                                                                                                                                                                 Single exon nucleic acid probes for analyzing gene expression in human hearts -
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Human; brain expressed exon; gene expression analysis; probe;
microarray; Alzhelmer's disease; multiple sclerosis; schizophrenia;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           present invention relates to single exon nucleic acid probes
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Sequence 454 BP; 135 A; 84 C; 120 G; 115 T; 0 other;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            4; Mismatches
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Score 16.8;
Pred. No. 96
                                                                                                                                                                                                                                                                                                                                                                                                                                     Claim 1; SEQ ID No 3226; 530pp; English.
                                                                                                                                                                                                                                                                                                              Rank DR;
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                                                                                                                                                                                                                                                                     (MOLE-) MOLECULAR DYNAMICS INC
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     73.0%;
70.0%;
                                                                                                                                                                                            21-SEP-2000; 2000US-0234687.
27-SEP-2000; 2000US-0236359.
04-OCT-2000; 2000GB-0024263.
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                                                                                                                                                                                                                                                                                                          Penn SG, Hanzel DK,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                epilepsy; cancer; ss
                                                                                                                                                                                                                                                                                                                                            WPI; 2001-488899/53
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           WO200157274-A2.
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05-NOV-2001

AAK03266;

AAK03266 RESULT

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Query Match

Matches

09-AUG-2001

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Gaps

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The present invention provides a number of single exon nucleic acid probes which are derived from genomic sequences expressed in the human bone marrow. They can be used to measure gene expression in bone marrow samples, which may enable the improved diagnosis and treatment of cancers such as lymphoma, leukaemia and myeloma. The present sequence is one of the probes of the invention.
                                                 Example 4; SEQ ID NO: 3276; 658pp + Sequence Listing; English.
analyzing gene expression in human bone marrow -
FX8X5000000XX8
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ó DB 22; Length 454; 2; Indels Query Match 73.0%; Score 16.8; D Best Local Similarity 70.0%; Pred. No. 98; Matches 14; Conservative 4; Mismatches ||:|| ||||||:| ||:: 182 CATGCAGAAGCCTCTACTT 201 2 CAUGCUGAAAGCCUCGACUU 21 ð 셤

Sequence 454 BP; 135 A; 84 C; 120 G; 115 T; 0 other;

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Gaps

Search completed: June 12, 2003, 01:44:59 Job time: 134.802 secs

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Ouery Match
Best Local Similarity 77.3
Matches 17; Conservative
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                                                               June 12, 2003, 01:18:34 ; Search time 22.066 Seconds (without alignments) . 319.658 Million cell updates/sec
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Sequence 14, 1
Sequence 1, Al
Sequence 1065,
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                                                                                                                                                                                                                                                                                                           /cgg2_6/ptodata/1/ina/5A_COMB.seq:*
/cgn2_6/ptodata/1/ina/5B_COMB.seq:*
/cgn2_6/ptodata/1/ina/6B_COMB.seq:*
/cgn2_6/ptodata/1/ina/6B_COMB.seq:*
/cgn2_6/ptodata/1/ina/PCTUS_COMB.seq:*
/cgn2_6/ptodata/1/ina/PCTUS_COMB.seq:*
    GenCore version 5.1.6
Copyright (c) 1993 - 2003 Compugen Ltd.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            US-07-720-587A-1

US-09-103-840A-1

US-09-103-840A-1

US-08-148-910-14

US-09-645-073-1

US-09-221-0178-1065

US-08-99-416-281

US-08-99-416-281

US-08-92-388-22

US-08-926-789-13

US-08-926-789-13

US-08-926-789-13

US-09-166-093-22

US-09-166-093-22

US-09-166-093-12

US-09-166-093-12
                                                                                                                                                                                                  Total number of hits satisfying chosen parameters:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         US-08-323-445A-7
                                                                                                                                                                                  441362 seqs, 153338381 residues
                                                                                                                                                                                                                                                                                                                                                                                                                              SUMMARIES
                                                                                                                                23
                                                                                                                                                                                                                                                   Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries
                                            - nucleic search, using sw model
                                                                                                                              1 reaugeugaaageeuegaeuueg
                                                                                                                                                  IDENTITY_NUC
Gapop 10.0 , Gapext 1.0
                                                                                                                                                                                                                                                                                                   Issued_Patents_NA:*
                                                                                                  US-09-674-195C-19
23
                                                                                                                                                                                                                        Minimum DB seq length: 0
Maximum DB seq length: 200000000
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Match Length DB
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       4403765
4411529
2033
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                                                                                                                                                  Scoring table:
                                                                                                          Title:
Perfect score:
                                             OM nucleic
                                                                                                                               Seguence:
                                                                                                                                                                                 Searched:
                                                                                                                                                                                                                                                                                                 Database
                                                                 Run on:
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Sequence 1
Sequence 1
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Sequence 1
Sequence 1
Sequence 1
Sequence 1
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Sequence 6
Sequence 6
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Sequence
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Pred. No. 0.023;
5; Mismatches 0; Indels
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CLASSIFICATION: 435

PRIOR APPLICATION DATA: including application PRIOR APPLICATION DATA: including application PRIOR APPLICATION DATA: described below: FILING DATE: APPORNEY. APPLICATION NUMBER: 191/121

REGISTRATION NUMBER: 32,327

REFERENCE/DOCKET NUMBER: 193/121

TELECOMMUNICATION INFORMATION: SEQUENCE CHRACTERISTICS: TEMATH. 22
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Sequence 1, Application US/07720587A
Patent No. 5352579
GENERAL INFORMATION:
GENERAL INFORMATION:
TITLE OF INVENTION: NUCLEIC ACIDS PROBES
TITLE OF INVENTION: TO HISTOPLASMA CAPSULATUM
NUMBER OF SEQUENCES: 3
CORRESPONDENCE ADDRESS:
ADDRESSEE: Lyon & Lyon
STREET: 611 West Sixth Street
CITY: Los Angeles
CONTEXT: California
CONTEXT: USA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              COMPUTER READBLE FORM:
MEDIUM TYPE: 3.5" Diskette, 1.44 Mb storage
COMPUTER: IBM Ps/2 Model 50.2 or 55.8X
OPERATING SYSTEM: IBM P.C. DOS (Version 3.30)
SOFTWARE: WordPerfect (Version 5.0)
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/07/720,587A
FILING DATE: 19910628
PCT - USS 5 - 12840 - 7
US - 09 - 420 - 592A - 3
US - 09 - 420 - 592A - 3
US - 09 - 126 - 093 - 18
US - 09 - 166 - 093 - 18
US - 09 - 166 - 093 - 18
US - 09 - 166 - 094 - 18
US - 08 - 920 - 812 - 13
US - 08 - 920 - 812 - 13
US - 08 - 920 - 812 - 13
US - 08 - 920 - 812 - 13
US - 08 - 920 - 812 - 13
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77.38;
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Sequence 14, Application US/08448937A Patent No. 5677164
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                FILING DATE:
ATTORNEY/AGENT INFORMATION:
NAME: Warren M. Cheek, Jr.
REGISTRATION NUMBER: 33,367
REFRENCE/POCKET UNMBER:
TELECOMMUNICATION INFORMATION:
TELEPHONE: 202-371-8850
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              INFORMATION FOR SEQ ID NO: : SEQUENCE CHARACTERISTICS: LENGTH: 2033 base pairs
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              13; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TELEFAX: 202-371-8856
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TYPE: nucleic acid
STRANDEDNESS: doub
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Query Match
Best Local Similarity
                                                                                                                                                                                                                                    STATE: D.C.
COUNTRY: U.S.A.
ZIP: 20005
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            IMMEDIATE SOURCE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          US-08-448-937A-14
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Sequence 1, Application US/09103840A

Sequence 1, Application US/09103840A

GENERAL INFORMATION,

APPLICANT: FLEISCHMAN, Robert D.

APPLICANT: FRASER, Claire M.

APPLICANT: FRASER, Claire M.

APPLICANT: FRASER, John C.

TITLE OF INVENTION: TUBERCULOSIS

FILE REFERENCE: 24566-2007.00

CURRENT APPLICATION NUMBER: US/09/103,840A

CURRENT APPLICATION NUMBER: US/09/103,840A

NUMBER OF SEQ ID NOS: 2

SOFTWARE: Patentin Ver. 2.1

SEQ ID NO. 1

LENGTH: 4411529
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  OTHER INFORMATION: CDC 1551
OTHER INFORMATION: "n" bases at various positions throughout the sequence
OTHER INFORMATION: represent a, t, c or g
                                                                                                                                                                                                             APPLICANT: FLEISCHAN, Robert D.
APPLICANT: WHITE, Owen R.
APPLICANT: WHITE, Owen R.
APPLICANT: WHITE, Owen R.
APPLICANT: FASER, Claire M.
APPLICANT: PRESER, Claire M.
APPLICANT: VENTER, John C.
TITLE OF INVENTION: TUBERCULOSIS
FILE REFERENCE: 24366-22007,00
CURRENT APPLICATION NUMBER: US/09/103,840A
CURRENT FILING DATE: 1998-06-24
NUMBER OF SEQ ID NOS: 2
SOFTWARE: PATENTIN Ver. 2.1
SEQ ID NO 2
LENGTH: 4403765
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       0; Gaps
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Pred. No. 28;
3; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Query Match 74.8%; Score 17.2; D
Best Local Similarity 72.7%; Pred. No. 28;
Matches 16; Conservative 3; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          171902 CATGGTGAAAGCCTCGACAGCG 171881
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ; TYPE: DNA
ORGANISM: Mycobacterium tuberculosis
; OTHER INFORMATION: H37Rv
US-09-103-840A-1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ORGANISM: Mycobacterium tuberculosis
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   2 CAUGCUGAAAGCCUCGACUUCG 23
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2 CAUGCUGAAAGCCUCGACUUCG 23
                         22 CATGCTGAAAGCCTCGACTTCG 1
                                                                                                                                                  Sequence 2, Application US/09103840A Patent No. 6294328
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Query Match 74.8%;
Best Local Similarity 72.7%;
Matches 16; Conservative
                                                                                                                                                                                             GENERAL INFORMATION:
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                                                                                                                                US-09-103-840A-2/C
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APPLICANT: Takeshi SHIMOMURA et al.
APPLICANT: Takeshi SHIMOMURA et al.
TITLE OF INVENTION: No. 5677164el Protein and Gene Encoding Said Protein
NUMBER OF SEQUENCES: 14
CORRESPONDENCE ADDRESS:
ADDRESSEE: Wenderoth, Lind & Ponack
STREET: 805 Fifteenth Street, N.W., #700
Sequence 14, Application US/08148910
Patent No. 5466593
GENERAL INFORMATION:
APPLICANT: Takeshi SHIMOMURA et al.
TITLE OF INFORNION: No. 5466593el Protein and Gene Encoding Said Protein
NUMBER OF SEQUENCES: 14
CORRESPONDENCE ADDRESS:
ADDRESSEE: Wenderoth, Lind & Ponack
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Gaps
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        LIBRARY: Pre-made Lambda phage Library,
LIBRARY: human liver(49, male) cDNA Library (Stratagene)
                                                                                                                                                                                            ADDRESSEE: Wenderoth, Lind & Ponack
STREET: 805 Fifteenth Street, N.W., #700
CITY: Washington
                                                                                                                                                                                                                                                                                                                                  COMPUTER READABLE FORM:
MEDIUM TYPE: Diskette, 5.25 inch,
MEDIUM TYPE: 500 Kb Storage
COMPUTER: IBM Compatible
OPERATING SYSTEM: MS-DOS
SOFTWARE: WORDPETFECT
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/148,910
FILING DATE: NO. 5466593ember 5, 1993
CLASSIFICATION DATA:
APPLICATION NUMBER:
APPLICATION DATA:
APPLICATION DATA:
APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    350 GCATGCTGCATGCCTTCG 372
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STATE: D.C.
COUNTRY: U.S.A.
ZIP: 20005
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APPLICANT: ROSS, Bruce C.
TITLE OF INVENTION: P. GINGIVALIS NUCLEOTIDES AND USES THEREOF NUMBER OF SEQUENCES: 1120
CORRESPONDENCE ADDRESS:
ADDRESSEE: MORRISON & FOERSTER
STREET: 755 PAGE MILL ROAD
CITY: Palo Alto
                                                                                                                                                                                                                                                        STATE: C. COUNTRY: USA
ZIP: 94304-1018
ZIP: 94304-1018
COMPUTER READABLE FORM:
MEDIUM TYPE: Diskettee
COMPUTER: IBM Compatible
OPERATING SYSTEM: Windows
SOFTWARE: FeastEop for Windows
SOFTWARE: FeastEop for Windows
SOFTWARE: TastEop for Windows
SOFTWARE: TastEop for Windows
FILICATION NUMBER: US/09/221,017B
FILING DATE: Z3-DEC-1998
                                                                                                                                                                                                                                                                                                                                                                                                                                                               CLASSIFICATION:
PRIOR APPLICATION DATA:
PRIOR APPLICATION DATA:
APPLICATION NUMBER:
FILING DATE: 30-DEC-1997
FILING DATE: 30-JAN-1998
FRIOR APPLICATION DATA:
APPLICATION NUMBER: PP1546
FILING DATE: 09-APR-1998
PRIOR APPLICATION DATA:
APPLICATION NUMBER: PCT/ANU98/01023
FILING DATE: 10-DEC-1998
ATTORNEY/GERT INFORMATION:
NAME: MONICOY, Gladys H
REGISTRATION NUMBER: 32,430
PREPERBRICE AND NUMBER: 32,430
                                                            Sequence 1065, Application US/09221017B
Patent No. 6444799
GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            68.7%;
61.9%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  REFERENCE/DOCKET NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ) NAME/KEY: misc_feature
; LOCATION: 1...522
US-09-221-017B-1065
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TELEX: 706141
INFORMATION FOR SEQ ID NO:
SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       522 base pairs
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Query Match 68.7
Best Local Similarity 61.9
Matches 13; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TYPE: nucleic acid
STRANDEDNESS: double
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               circular
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               HYPOTHETICAL: NO
ANTI-SENSE: UNKNOWN
ORIGINAL SOURCE:
                                            -09-221-017B-1065
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TOPOLOGY:
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                          RESULT 7
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ILIBRARY: Pre-made Lambda phage Library,
ILIBRARY: human liver(49, male) cDNA Library (Stratagene)
US-08-448-937A-14
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Indels
              MEDIUM TYPE: Diskette, 5.25 inch, MEDIUM TYPE: 500 Kb Storage COMPUTER: 1BM Compatible OPERATING SYSTEM: MS-DOS SOFTWARE: Wordperfect CURRENT APPLICATION DATA: APPLICATION NUMBER: US/08/448,937A FILING DATE: MAY 24, 1995 CLASSIFICATION: 435 PRIOR APPLICATION WHERE: 08/148,910 FILING DATE: NO. 5677164ember 5, 1993 ATTORNEY AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Query Match 70.4%; Score 16.2; I Best Local Similarity 56.5%; Pred. No. 37; Matches 13; Conservative 6; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Query Match 70.4%; Score 16.2; Dest Local Similarity 60.9%; Pred. No. 38; Matches 14; Conservative 5; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           350 GCATGCTGCATGCCTGCACTTCG 372
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145 ACATGCTAAAAATCCCGACTTCG 167
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1 RCAUGCUGAAAGCCUCGACUUCG 23
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1 RCAUGCUGAAAGCCUCGACUUCG 23
                                                                                                                                                                                                                                                                     NAME: Warren M. Cheek, Jr.
REGISTRATION NUMBER: 33,367
REFERENCE/DOCKET NUMBER:
TELECOMMUNICATION INFORMATION:
TELEPHONE: 202-371-8850
TELEFAX: 202-371-8856
                                                                                                                                                                                                                                                                                                                                                                                               INFORMATION FOR SEQ ID NO: 14:
SEQUENCE CHARACTERISTICS:
LENGTH: 2033 base pairs
TYPE: nucleic acid
STRANDEDNESS: double
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ; TYPE: DNA
; ORGANISM: Gibberella fujikuroi
US-09-645-073-1
COMPUTER READABLE FORM:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     MOLECULE TYPE: CDNA
ORIGINAL SOURCE:
ORGANISM: human
IMMEDIATE SOURCE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       RESULT 6
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                                                                                                                                                                                                                                                                                                                                                Length 522;
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                                                                                                                                                                                                                                                                                                                                                DB 4;
                                                                                                                                                                                                                                                                                                                                              Score 15.8; D
Pred. No. 48;
5; Mismatches
27340-20021.00
                                                                                                                                                                                                                                            ORGANISM: PORYPHYROMONAS GINGIVALIS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           RESULT 8
US-08-998-416-281/c
; Sequence 281, Application US/08998416
                                                                                                                                                                                                                                                                                                                                                                                                                                 337 ACATGCTGGAAGCCTCGGCCT 357
                                                                                                                                                                                                                                                                                                                                                                                                            1 RCAUGCUGAAAGCCUCGACUU 21
          TELECOMMUNICATION INFORMATION:
TELEPHONE: 650-813-5600
TELEFAX: 650-494-0792
                                                                                                                                                                           MOLECULE TYPE: DNA (genomic) HYPOTHETICAL: NO
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DB 2; Length 738;
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APPLICANT: Whitlow, Marc
APPLICANT: Wood, James F.
APPLICANT: Hardman, Karl
APPLICANT: Bird, Robert
APPLICANT: Filpula, David
TITLE OF INVENTION: Multivalent Antigen-Binding Proteins
NUMBER OF SEQUENCES: 23
CORRESPONDENCE ADDRESS:
ADDRESSE: Sterne, Kessler, Goldstein & Fox P.L.L.C.
STEREMENT OF SECURITY OF S
                                  COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                SOFTWARE: Patentin Release #1.0, Version #1.25 CURRENT APPLICATION DATA:
                                                                                                                                                                                                                        CORRENT AFFLICATION DATA:

CLASSIFICATION NUMBER: US/08/224,591
FILING DATE: Herewith
CLASSIFICATION T. 530
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/002,845
FILING DATE: 15-JAN-1993
APPLICATION NUMBER: US 07/980,529
FILING DATE: 20-NOV-1992
ATTORNEY/AGENT INFORMATION:
NAME: GOLGStein, Jorge A.
REGISTRATION NUMBER: 29,021
REFERENCE/DOCKET NUMBER: 29,021
FELECOMMUNICATION INFORMATION:
TELEPHONE: (202) 371-260
INFORMATION FOR SEQ ID NO: 13:
SEQUENCE CHARACTERESTICS:
LENGTH: 738 base pairs
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Pred. No. 51;
5; Mismatches
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FILING DATE: 22-FEB-1995
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 07/989,846
FILING DATE: 20-NOV-1992
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        STREET: 1100 New York Avenue, NW CITY: Washington STATE: D.C. STATE: D.S.A. ZIP: 20005
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MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               US-08-392-338A-22
; Sequence 22, Application US/08392338A
; Patent No. 5869620
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63.28;
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Best Local Similarity 63.2
Matches 12; Conservative
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join(1..726)
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STRANDEDNESS: both
TOPOLOGY: both
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      CLASSIFICATION:
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; LOCATION:
US-08-224-591-13
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                                                                                            APPLICANT: Pohlman, Rainer
APPLICANT: Steiner, Sabine
APPLICANT: Steiner, Sabine
APPLICANT: Woh, Christine
APPLICANT: Wendland, Jurgen
APPLICANT: Wenchtle, Philipp
APPLICANT: Rebischung, Corinne
TITLE OF INVENTION: GENOMIC DNA SEQUENCES OF ASHBYA GOSSYPII
TITLE OF INVENTION: AND USES THEREOF
UNMBER OF SEQUENCES: 1152
CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Length 709;
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Patent No. 5856456
GENERAL INFORMATION:
APPLICANT: Whitlow, Marc
APPLICANT: Filpula, David
TITLE OF INVENTION: Linker For Linked Fusion Polypeptides
NUMBER OF SEQUENCES: 25
CORRESPONDENCE ADDRESS:
ADDRESSEE: Sterne, Kessler, Goldstein & Fox
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ZIP: 27709
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
COMPOTER: IBM PC compatible
COMPOTER: IBM PC compatible
COMPARE: Patentin Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/998,416
FILING DATE: 24-DEC-1997
CLASSIFICATION: 435
PRIOR APPLICATION NUMBER: CH 0016/97
RILING DATE: 31-DEC-1996
ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         NAME: Weigs, J. Timothy
REGISTRATION NUMBER: 38,241
REFERENCE/DOCKET NUMBER: 98,241
TELECOMMUNICATION INPORMATION:
TELEPHONE: 919-541-8687
TELEPHONE: 919-541-8689
INFORMATION FOR SEQ ID NO: 281:
SECONENCE CHARACTERISTICS:
LENGTH: 709 base pairs
TYPE: nucleic acid
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                                                                                                                                                                                                                                                                                                                                                                                                                     ADDRESSEE: No. 6239264artis Corporation STREET: 3054 Cornwallis Road CITY: Research Triangle Park STATE: No. 6239264th Carolina COUNTRY: USA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Mismatches
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Pred. No. 5
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ORIGINAL SOURCE:
ORGANISM: PAG1237UP
US-08-998-416-221
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Query Match 68.7%;
Best Local Similarity .57.1%;
Matches 12; Conservative (
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                                                                        Philippsen,
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Patent No. 6239264
GENERAL INFORMATION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TYPE: nucleic
STRANDEDNESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            COUNTRY:
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Length 738; Indels

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Sequence 22, Application US/09166750
Patent No. 6025165
GENERAL INFORMATION, MAIC
APPLICANT: Whitlow, Marc
APPLICANT: Wood, James F.
APPLICANT: Blid, Robert
APPLICANT: Blid, Robert
APPLICANT: Filpula, David
APPLICANT: Rollence, Michelle
TITLE OF INVENTION: Methods for Producing Multivalent Antigen-Binding
NUMBER OF SEQUENCES: 23
CORRESPONDENCE 23
CORRESPONDENCE ADDRESS:
ADDRESSE: Sterne, Kessler, Goldstein & Fox P.L.L.C.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           3: Sterne, Kessler, Goldstein & Fox P.L.L.C.
1100 New York Avenue, NW
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.25
GURRENT APPLICATION DATA:
APPLICATION NUMBER: US/09/166,750
FILING DATE: Herewith
                                                                                                                                                                                                                                                                              Score 15.8; DB Pred. No. 51; 5; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   PRICE APPLICATION DATA:
APPLICATION NUMBER: US 08/392,338
FILING DATE: 22-FEB-1995
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 07/989,846
FILING DATE: 20-NOV-1992
PRIOR APPLICATION NUMBER: US 07/796,936
FILING DATE: 25-NOV-1991
ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  CITY: Washington
STATE: D.C.
COUNTRY: U.S.A.
ZIP: 20005
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DO
SOFTWARE: Patentin Release ***
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332 TGCTGAAAGGCTCTACTTC 350
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REGISTRATION NUMBER: 29,021
REFERENCE/DOCKET NUMBER: 0977
TELECOMMUNICATION INFORMATION:
TELEPHONE: (202) 371-2600
TELEFAX: (202) 371-2540
INFORMATION FOR SEQ ID NO: 22:
SEQUENCE CHARATERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                          4 UGCUGAAAGCCUCGACUUC 22
                                                                                                                                                                                                                                                                              Query Match
Best Local Similarity 63.2%;
Matches 12; Conservative
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STRANDEBESS: both
TOPOLOGY: both
                                                                                                                                                         CDS
join(1..726)
STRANDENESS: both TOPOLOGY: both FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               CLASSIFICATION:
                                                                                                                                                  ; NAME/KEY:
; LOCATION:
US-08-926-789-13
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ; NAME/KEY:
; LOCATION:
US-09-166-750-22
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US-09-166-750-22
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APPLICANT: Filpula, David
TITLE OF INVENTION: Linker For Linked Fusion Polypeptides
NUMBER OF SEQUENCES: 25
CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/926,789
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                                   APPLICATION TO THE STATE OF THE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         3: Sterne, Kessler, Goldstein & 1100 New York Avenue, Suite 600
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Score 15.8;
Pred. No. 5
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APPLICATION NUMBER: US 08/002,845
FILING DATE: 15-JAN-1993
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 07/980,529
FILING DATE: 20-NOV-1992
ATTORNEY/AGENT INFORMATION:
NAME: Goldstein, Jorge A.
REGISTATION NUMBER: 29,021
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       5-08-926-789-13
Sequence 13, Application US/08926789
Patent No. 5990275
GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                CLASSIFICATION:
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 08/224,591
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    :||:||||| |:| ||::|
332 TGCTGAAAGGCTCTACTTC 350
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Best Local Similarity 63.2%;
Matches 12; Conservative
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             PRIOR APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                CITY: Washington
STATE: D.C.
COUNTRY: U.S.A.
ZIP: 20005
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ; NAME/KEY: CDS
; LOCATION: 1..726
US-08-392-338A-22
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   FILING DATE
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      STREET:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     FEATURE:
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APPLICANT: BIRd, Robert
The Problem of the Control of the Chain Strong S
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1100 New York Avenue, NW
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               SOFTWARE: Patentin Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
BLILCATION NUMBER: US/09/172,019
FILING DATE: Herewith
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     DB 3;
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Pred. No. 51;
5; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           FILING DATE: HEREWITH CLASSIFICATION: PRIOR APPLICATION DATA:

APPLICATION NUMBER: US 08/392,338
FILING DATE: 22-FEB-1995
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 07/989,846
FILING DATE: 20-NOV-1992
PRIOR APPLICATION NUMBER: US 07/796,936
FILING DATE: 25-NOV-1991
APPLICATION NUMBER: US 07/796,936
FILING DATE: 25-NOV-1991
ATTORNEY/AGENT INFORMATION:
NAME: Goldstein, Jorge A.
REGERRACE/DOCKET NUMBER: 09/71.003000.
TELECOMMUNICATION INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
                                                                                           Sequence 22, Application US/09172019
Patent No. 6103808
GENERAL INFORMATION:
APPLICANT: Whitlow, Marc
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            US-09-166-094-22
Sequence 22, Application US/09166094
Petent No. 6121424
GENERAL INFORMATION:
APPLICANT: Whitlow, Marc
APPLICANT: Wood, James F.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   332 IGCIGAAAGGCICTACTIC 350
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Best Local Similarity 63.2
Matches 12; Conservative
                                                                                                                                                                                                                               Hardman, Karl
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CITY: Washington
STATE: D.C.
COUNTRY: U.S.A.
21P: 20005
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TOPOLOGY: bc
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US-09-172-019-22
                                    RESULT 14
US-09-172-019-22
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   DB 3; Length 738;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    APPLICANT: Filpula, David
APPLICANT: Filpula, David
APPLICANT: Rollence, Michelle
TITLE OF INVENTION: Multivalent Antigen-Binding Proteins
NUMBER OF SEQUENCES: 23
CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Indels
                                                                 Indels
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        COUNTRY: U.S.A.

ZIP: 20005

ZIP: 20005

COMPUTER FRODBLE FORM:

MEDIUM TYPE: Floppy disk

COMPUTER: IBM PC compatible

OPERATING SYSTEM: PC-DOS/MS-DOS

SOFTWARE: Patentin Release #1.0, Version #1.25

CURRENT APPLICATION DATA:

APPLICATION NUMBER: US/09/166,093

FILING DATE: Herewith
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Pred. No. 51;
5; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             PRIOR PAPLICATION DATA:
APPLICATION DATA:
APPLICATION NUMBER: US 08/392,338
FILING DATE: 22-FEB-1995
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 07/989,846
FILING DATE: 20-NOV-1992
PRIOR APPLICATION DATA:
FILING DATE: 20-NOV-1991
APPLICATION NUMBER: US 07/796,936
FILING DATE: 25-NOV-1991
ATTORNEY/AGENT INFORMATION:
NAME: Goldstein, Jorge A.
REGISTRATION NUMBER: 0977.003000B
TELECOMMUNICATION INFORMATION:
                                                              Mismatches
   Score 15.8;
Pred. No. 51;
                                                                                                                                                                                                                                                                                                                                              Sequence 22, Application US/09166093 Patent No. 6027725
                                                                                                                                                             332 TGCTGAAAGGCTCTACTTC 350
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TGCTGAAGGCTCTACTTC 350
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TELEFAX: (202) 371-2540
INFORMATION FOR SEQ ID NO: 22:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Query Match 68.7%;
Best Local Similarity 63.2%;
Matches 12; Conservative
Query Match
Best Local Similarity 63.2%;
Matches 12; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                              Whitlow, Marc
Wood, James F.
Hardman, Karl
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Bird, Robert
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 STATE: D.C
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ; LOCATION:
US-09-166-093-22
                                                                                                                                                                                                                                                                                                                    US-09-166-093-22
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               APPLICANT:
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Gaps

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Length 738; Indels

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APPLICANT: Hardman, Karl
APPLICANT: Filpula bayid
APPLICANT: Follence, Michelle
TITLE OF INVENTION: Militivalent Antigen-Binding Proteins
NUMBER OF SECURES: 3
CORRESPONDENCE ANDRESS:
ADDRESSEE Sterne, Kessler, Goldstein & Fox P.L.C.C.
COUNTRY: U.S.A.
INTER: 100 New York Avenue, NW
STARE: D.C.
COUNTRY: U.S.A.
INTER: D.C.
CONFORT: IN PROPOSITION FOR STARS: COMPOTER: IN PROPOSITION BAYES: BATCHIN Release #1.0, Version #1.25
CONFORTS: IN PROPOSITION BAYES: US 09/392,338
FILLING DATE: Herewith
CLASSIFICATION DATE: US 07/389,846
FILLING DATE: Herewith US 07/389,846
FILLING DATE: 22-FEB-1995
FILLING DATE: 22-FEB-1995
FILLING DATE: 22-FEB-1995
FILLING DATE: 23-FEB-1995
FILLING DATE: US 07/389,846
FILLING DATE: 23-FEB-1995
FILLING DATE: 33-1995
FILL
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Query Match 68.7%; Score 15.8; DB 3; Length 738; Best Local Similarity 63.2%; Pred. No. 51; Matches 12; Conservative 5; Mismatches 2; Indels 0; Gaps Qy 4 UGCUGAAAGCCUCGACUUC 22
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239.539 Million cell updates/sec
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16: /cgn2_6/ptodata/Z/pubpna/USO8_NEW_PUB.seq:*
17: /cgn2_6/ptodata/Z/pubpna/USO8_NEW_PUB.seq:*
18: /cgn2_6/ptodata/Z/pubpna/USO8_NEW_PUB.seq:*
19: /cgn2_6/ptodata/Z/pubpna/USO8_NEW_PUB.seq:*
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GenCore version 5.1.6
Copyright (c) 1993 - 2003 Compugen Ltd.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            870385 seqs, 699768693 residues
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Maximum Match 100%
Listing first 45 summaries
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                                                                                                                                OM nucleic - nucleic search, using sw model
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Gapop 10.0 , Gapext 1.0
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23
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Perfect score:
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Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

/cgn2_6/ptodata/2/pubpna/US60_NEW_PUB.seq:*/cgn2_6/ptodata/2/pubpna/US60_PUBCOMB.seq:*

SUMMARIES

Description	Sequence 1, Appli	Sequence 3226. Ap	Sequence 155, App	Sequence 179, App	Sequence 552, App	Sequence 1612; Ap	Sequence 3945, Ap	Sequence 6, Appli	Sequence 10265. A		Sequence 5, Appli		a,		Sequence 1, Appli	m	<u>.</u> س		A
ID	US-10-067-514-1	US-09-864-761-3226	US-09-989-643-155	US-09-974-300-179	US-09-954-456-552	US-09-880-107-1612	US-09-880-107-3945	US-09-952-213D-6	US-09-783-590-10265	US-09-991-936-838	US-09-791-578-5	US-09-791-540-5	us-09-956-086-1	US-09-956-087-1	US-09-985-442-1	US-09-791-578-3	US-09-791-540-3	US-09-983-580-1	US-09-985-442-3
å Ouery Match Length DB	1691139 9	454 10	891 9	1097 10	2036 10	2036 10	20556 10	177556 9	365 10	550 9	723 10	723 10	758 9	758 9	782 9	782 10	782 10	782 10	818 9
Query Match 1	74.8	73.0	70.4	70.4	70.4	70.4	70.4	70.4	68.7	68.7	68.7	68.7	68.7	68.7	68.7	68.7	68.7	68.7	68.7
Score	17.2	16.8	16.2	16.2	16.2	16.2	16.2	. 16.2	15.8	15.8	15.8	15.8	15.8	15.8	15.8	15.8	15.8	15.8	15.8
Result No.	ر د	7	e	O	Ŋ	9	7	8 0	o 0	c 10	11	12	13	14	15	16	17	18	19

Sequence 3, Appli Sequence 271, App Sequence 19, Appl Sequence 665, App Sequence 3603, App Sequence 336, App Sequence 536, Appl Sequence 29160, A Sequence 7091, Ap Sequence 1677, Ap Sequence 1677, Ap Sequence 30049, A Sequence 3020, A Sequence 15514, A Sequence 163, Appl Sequence 16, Appl Sequence 16, Appl Sequence 16, Appl Sequence 16, Appl Sequence 16, Appl Sequence 16, Appl	Sequence 1, Appli Sequence 83, Appl Sequence 98, Appl Sequence 98, Appl Sequence 25, Appl
10 US-09-983-580-3 10 US-09-770-445-271 10 US-09-770-45-271 10 US-09-878-574-655 10 US-09-878-574-3603 10 US-09-867-701-8410 10 US-09-867-701-8410 10 US-09-867-701-8410 10 US-09-864-761-29160 10 US-09-864-761-29160 10 US-09-18-995-30320 10 US-09-18-995-30320 10 US-09-918-995-30320 10 US-09-918-995-30320 10 US-09-918-995-30320 10 US-09-918-995-30318 10 US-09-918-995-30318	9 US-10-164-433-1 9 US-10-278-173-83 9 US-09-925-299-98 10 US-09-925-299-98 9 US-09-894-844-25
818 1279 13179 13179 13175 131	843 861 1186 1186 1413
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15.50 15.50	15.2 15.2 15.2 15.2
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ALIGNMENTS

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Sequence 3226, Application US/09864761
Patent No. US2002048763a1
GENERAL INFORMATION:
APPLICANT: Penn, Sharron G.
APPLICANT: Rank, David R.
APPLICANT: Chen, Wensheng
TITLE OF INVENTION: HUMAN GENOME-DERIVED SINGLE EXON NUCLEIC ACID PROBES USEFUL FO
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                 Length 1691139;
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Best Local Similarity 63.6%; Pred. No. 45;
Matches 14; Conservative 5; Mismatches
             Sequence 1. Application US/10067514
| Publication No. US20030054531A1
| GENERAL INFORMATION:
| APPLICANT: Gretarsdottir, Solveig
| APPLICANT: Jonsdottir, Siff
| TITLE OF INVENTION: HUMAN STROKE GENE
| FILE REFERENCE: 2345.2010-003
| CURRENT APPLICATION NUMBER: US/10/67,514
| CURRENT FILING DATE: 2002-02-04
| PRIOR FILING DATE: 2001-03-19
| NUMBER OF SEQ ID NOS: 84
| SOFTWARE: FastSEQ for Windows Version 4.0
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LENGTH: 1691139
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US-10-067-514-1
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US-10-067-514-1/c
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US-09-954-456-552
; Sequence 552, Application US/09954456
; Sequence 552, Application US/09954456
; GENERAL INFORMATION:
; APPLICAMT: Young, Paul
; TITLE OF INVENTION: Process for Identifying Anti-Cancer Therapeutic Agents Using C; TITLE OF INVENTION: Sets
APPLICANT: Outllette, Marc
APPLICANT: Outllette, Marc
APPLICANT: Outllette, Marc
APPLICANT: Roy, Paul H.
TITLE OF INVENTION: Species-Specific, Genus-Specific and Universal DNA
TITLE OF INVENTION: Dentify Common Bacterial and Fungal Pathogens and
TITLE OF INVENTION: Associated Antibiotic Resistance Genes from
TITLE OF INVENTION: Associated Antibiotic Resistance Genes from
FILE REFERENCE: 12287. 29
CURRENT APPLICATION NUMBER: US/09/989,643
CURRENT FILING DATE: 2001-11-20
PRIOR APPLICATION NUMBER: EARLIER APPLICATION NUMBER: 09/297,539
PRIOR PLILNG DATE: BARLIER FILING DATE: 1999-05-09
PRIOR FILING DATE: BARLIER FILING DATE: 1996-11-04
NUMBER OF SEQ ID NOS: 174
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Patent No. US20020146721A1

GENERAL INFORMATION:

APPLICANT: Berka, Randy M.

APPLICANT: Clausen, ID Groth

TITLE OF INVENTION: Methods For Monitoring Multiple Gene

TITLE OF INVENTION: Expression

FILE REFRENCE: 10085.500-US

CURRENT APPLICATION UNBER: US/09/974,300

CURRENT FILING DATE: 2001-10-05

PRIOR APPLICATION NUMBER: 09/680,598

PRIOR APPLICATION NUMBER: 09/680,596

PRIOR APPLICATION NUMBER: 60/279,526

PRIOR PRILING DATE: 2001-03-27
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Indels
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              DB 9;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Fred. No. 89;
3; Mismatches
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Pred. No. 89;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           70.4%; Score 16.2; 66.7%; Pred. No. 87
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         NUMBER OF SEQ ID NOS: 8481
SOFTWARE: FastSEQ for Windows Version 4.0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1:||:|||| |:|||| :||
158 ATGCTGAAATTCTCGACCTCG 178
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TYPE: DNA ORGANISM: Fibrobacter succinogenes
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 3 AUGCUGAAAGCCUCGACUUCG 23
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TYPE: DNA
CORGANISM: Bacillus licheniformis
US-09-974-300-179
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                3 AUGCUGAAAGCCUCGACUUCG
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ilarity 71.4%;
Conservative
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Best Local Similarity 66.7
Matches 14; Conservative
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Best Local Similarity
Matches 15; Conserva
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LENGTH: 1097
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   N: EXPRESSED IN ADULT LIVER, SIGNAL = 0.99
N: EXPRESSED IN BRAIN, SIGNAL = 1.5
N: EXPRESSED IN PLACENTA, SIGNAL = 1.2
N: EXPRESSED IN HEA74, SIGNAL = 1.2
N: EXPRESSED IN HEART, SIGNAL = 1.2
N: EXPRESSED IN HELA, SIGNAL = 1.3
N: EXPRESSED IN HELA, SIGNAL = 1.3
N: EXPRESSED IN HBL100, SIGNAL = 0.98
N: EXPRESSED IN HBL100, SIGNAL = 0.98
N: EXPRESSED IN FETAL LIVER, SIGNAL = 1.3
N: EXPRESSED IN FETAL LIVER, SIGNAL = 1.4
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ;;
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70.0%; Pred. No. 41;
Live 4; Mismatches
CURRENT FILING DATE: 2001-03-23
PRIOR APPLICATION NUMBER: US 60/180,312
PRIOR PELLING DATE: 2000-02-04
PRIOR PELLING DATE: 2000-02-04
PRIOR PELLING DATE: 2000-05-26
PRIOR PELLING DATE: 2000-08-03
PRIOR PELLING DATE: 2000-08-03
PRIOR PELLING DATE: 2000-01-04
PRIOR PELLING DATE: 2000-01-04
PRIOR PELLING DATE: 2000-09-27
PRIOR PELLING DATE: 2001-01-30
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OTHER INFORMATION: EXPRESSED IN ADULT LI
OTHER INFORMATION: EXPRESSED IN BRAINT
OTHER INFORMATION: EXPRESSED IN BRAINT
OTHER INFORMATION: EXPRESSED IN BT474, S
OTHER INFORMATION: EXPRESSED IN HEART, S
OTHER INFORMATION: EXPRESSED IN LUNG, SI
OTHER INFORMATION: EXPRESSED IN LUNG, SI
OTHER INFORMATION: EXPRESSED IN HELLA, OTHER INFORMATION: EXPRESSED IN HELLA, OTHER INFORMATION: EXPRESSED IN HELLA, OTHER INFORMATION: EXPRESSED IN FETAL LI
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| CATGCAGAAGCCTCTACTT 201
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Best Local Similarity 70.0°
Matches 14; Conservative
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US-09-864-761-3226
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CURRENT APPLICATION NUMBER: US/09/954,456

APPLICATION NUMBER: US/60/233,617 FILING DATE: 2000-09-18 APPLICATION NUMBER: US/60/234,052 FILING DATE: 2000-09-20

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; ORGANISM: Homo sapiens
US-09-954-456-552
                                                                                                            ; OTHER INFORMATION: Genbank Accession No. US-09-880-107-1612
                                                                                                                                                                                                                                                                                                                                                                                                                                                        GENERAL INFORMATION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Sequence 1612, Application US/09880107 Patent No. US20020142981A1
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Best Local :
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SEQ ID NO 552
                                                               Query Match
Best Local Similarity
                                                  Matches
                                                                                                                                                                                                                                          PRIOR APPLICATION NUMBER: US 60/237,054
PRIOR FILING DATE: 2000-10-02
NUMBER OF SEQ ID NOS: 3950
                                                                                                                                                                                                                                                                                         PRIOR APPLICATION NUMBER: US 60/211,379 PRIOR FILING DATE: 2000-06-14
                                                                                                                                                                                                                                                                                                                         FILE REFERENCE: 44921-5028-WO
CURRENT APPLICATION NUMBER: US/09/880,107
CURRENT FILING DATE: 2001-06-14
                                                                                                                                                                                                                                                                                                                                                                        APPLICANT: Gene Logic, Inc.
TITLE OF INVENTION: Gene Expression Profiles in Liver Cancer
                                                                                                                                           LENGTH: 2036
TYPE: DNA
ORGANISM: Homo sapiens
FEATURE:
                                                                                                                                                                                                                           SOFTWARE: PatentIn Ver.
                                                                                                                                                                                                                                                                                                                                                                                                         APPLICANT:
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                                                                                                                                                                                                              ID NO 1612
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ETLING DATE: 2000-09-25
APPLICATION NUMBER: US/60/235,134
FILING DATE: 2000-09-25
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       APPLICATION NUMBER: US/60/235,711
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13; Conserv
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RCAUGCUGAAAGCCUCGACUUCG 23
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Scherf, Uwe
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                                                Conservative
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                                                                                                                                                                                                                                                                                                                                                                                                                     Joseph G.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                70.48;
                                                               70.48;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Score 16.2;
Pred. No. 93;
                                                               Score 16.2;
Pred. No. 93;
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                                                Mismatches
                                                                                                                           US20020142981A1 D14012
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                                                                              Length 2036;
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                                                Indels
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                                                Gaps
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; FEATURE: ; OTHER INFORMATION: Genbank Accession No. US-09-880-107-3945
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                                                                                                                             ; NAME/KEY: modified_base; ICCATION: (2293..144567); OTHER INFORMATION: N = A, C, US-09-952-213D-6
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US-09-952-213D-6/c
                                                                                                                                                                                                                                                                                                                                                                                          GENERAL INFORMATION:
APPLICANT: MURAD, FE
APPLICANT: SHARINA,
APPLICANT: KRUMENAC
                                                                Matches
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      SEQ ID NO 3945
LENGTH: 20556
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Query Match
                                                                                                                                                                                                                                                         SOFTWARE: PatentIn Ver. SEQ ID NO 6
                                                                                             Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                          Sequence 6, Application US/09952213D Publication No. US20030096240A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TITLE OF INVENTION: Gene expression Profiles FILE REFERENCE: 44921-5028-W0 CURRENT APPLICATION NUMBER: US/09/880,107 CURRENT FILING DATE: 2001-06-14
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     PRIOR APPLICATION NUMBER: US 60/237,054 PRIOR FILING DATE: 2000-10-02
                                                                                                                                                                                                                                                                                           CURRENT APPLICATION NUMBER: US/09/952,213D CURRENT FILING DATE: 2002-08-16 NUMBER OF SEQ ID NOS: 15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        SOFTWARE: PatentIn Ver.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      NUMBER OF SEQ ID NOS: 3950
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       PRIOR APPLICATION NUMBER: US 60/211,379 PRIOR FILING DATE: 2000-06-14
                                                                                                                                                                                                                                                                                                                                                        APPLICANT: MARTIN, E.
TITLE OF INVENTION: GENOMIC ORGANIZATION OF MOUSE AND HUMAN
                                                                                                                                                                                                                                                                                                                                              FILE REFERENCE: UTSH:252US
                                                                                                                                                                                                           ORGANISM: Mus musculus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ORGANISM: Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    PPLICANT:
                                                                                                                                                                                                                              TYPE: DNA
                                                                                                                                                                                             FEATURE:
                                                                                                                                                                                                                                             ENGTH: 177556
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 70.4%;
Local Similarity 56.5%;
ss 13; Conserva+***
1 RCAUGCUGAAAGCCUCGACUUCG 23
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                           1 RCAUGCUGAAAGCCUCGACUUCG 23
                                                              l Similarity
13; Conserv
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Scherf, Uwe
Gene Logic, Inc.
                                                                                                                                                                                                                                                                                                                                                                                          KRUMENACKER, J.
                                                                                                                                                                                                                                                                                                                                                                                                              SHARINA,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Application US/09880107)020142981A1
                                                                Conservative
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KER, J. S.
                                                                            70.4%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          6
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                                                              Score 16.2; DB 9;
Pred. No. 1.3e+02;
6; Mismatches 4
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Pred. No. 1.1e+02;
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                                                                                             Length 177556;
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                                                                Gaps
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; OTHER INFORMATION: n equals a,t,g, or c US-09-783-590-10265
                                                                                                                                                                                                                        US-09-991-936-838/c
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   NUMBER OF SEQ ID NOS: 12485
SOFTWARE: Patentin Ver. 2.0
SEQ ID NO 10265
LENGTH: 365
                                                                                                                                                               GENERAL INFORMATION:
                                                                                                                                                                              Sequence 838, A Publication No.
                                                                                                                                                                                                                                                                                                                                                                                                           Query Match
Best Local
                               APPLICANT: Brandt, Kevin S.
APPLICANT: Gaines, Patrick J.
APPLICANT: Stinchcomb, Dan T.
APPLICANT: Wisnewski, Nancy
TITLE OF INVENTION: FLEA HEAD, NERVE CORD, HINDGUT AND
TITLE OF INVENTION: NUCLEIC ACID MOLECULES, PROTEINS
CURRENT APPLICATION NUMBER: US/09/991,936
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           APPLICANT: Rosen, Craig A.
APPLICANT: Ruben, Steven M.
TITLE OF INVENTION: Human Genes, Sequences, and Expression Products 16.2
FILE REFERENCE: PO-16.2C1
CURRENT APPLICATION NUMBER: US/09/783,590
CURRENT FILING DATE: 2000-02-15
                     FILE REFERENCE: FC-6-C1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                PRIOR APPLICATION NUMBER: 08/420,856
PRIOR FILING DATE: 1995-04-12
PRIOR APPLICATION NUMBER: 08/346,731
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               APPLICANT: Dillon, Patrick J. APPLICANT: Haseltine, William APPLICANT: L1, Haodong
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     NAME/KEY: misc feature
LOCATION: (355)
OTHER INFORMATION: n equals a,t,g, or
NAME/KEY: misc feature
LOCATION: (364)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             NAME/KEY: misc feature
LOCATION: (349)
OTHER INFORMATION: n equals a,t,g, or c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 NAME/KEY: misc feature
LOCATION: (331)
OTHER INFORMATION: n equals a,t,g, or
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LOCATION: (329)
OTHER INFORMATION: n equals a,t,g,
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LOCATION: (321)
OTHER INFORMATION: n equals a,t,g,
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LOCATION: (342)
OTHER INFORMATION: n equals a,t,g, or
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      NAME/KEY: misc feature
LOCATION: (150)
OTHER INFORMATION: n equals a,t,g,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         quence 10265, Application US/09783590 tent No. US20020110850A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         PEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ORGANISM: Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                       Local Similarity
                                                                                                                                                                                                                                                                                                    275 ACATGGTGAAAACCTCAACTT 255
                                                                                                                                                                                                                                                                                                                                          1 RCAUGCUGAAAGCCUCGACUU 21
                                                                                                                                                                                                                                                                                                                                                                                      12;
                                                                                                                                                                              Application US/09991936 o. US20030073827A1
                                                                                                                                                                                                                                                                                                                                                                                    Conservative
                                                                                                                                                                                                                                                                                                                                                                                                    68.78;
57.18;
                                                                                                                                                                                                                                                                                                                                                                                                    Score 15.8;
Pred. No. 1
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                                                                                                                                                                                                                                                                                                                                                                                                    1.3e+02
                                 HINDGUT AND MALPIGHIAN TUBULE S, PROTEINS AND USES THEREOF
                                                                                                                                                                                                                                                                                                                                                                                                                     DB 10;
                                                                                                                                                                                                                                                                                                                                                                                                                     Length 365;
                                                                                                                                                                                                                                                                                                                                                                               Indels
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RESULT 11
US-09-791-578-5
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; TYPE: DNA
; ORGANISM: Ctenocephalides felis
US-09-991-936-838
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Sequence 5, Application US/09791578 Patent No. US20020061307A1 GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     SEQ ID NO 838
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         PRIOR FILING DATE: 1999-04-09
NUMBER OF SEQ ID NOS: 1959
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        SOFTWARE: PatentIn Ver. 2.1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CURRENT FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               PRIOR APPLICATION NUMBER: 60/128,704
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      PRIOR FILING DATE: 2000-04-07
                                                                                                   INFORMATION FOR SEQ ID NO: 5:
                                                                                                                                                                                                                                       PRIOR APPLICATION DATA:

APPLICATION NUMBER: 09/069,842

FILING DATE: <UNKNOWN>
APPLICATION NUMBER: US 60/050,472

FILING DATE: 23-JUN-1997

APPLICATION NUMBER: US 60/063,074

FILING DATE: 27-OCT-1997

APPLICATION NUMBER: US 60/067,341

FILING DATE: 02-DEC-1997

APPLICATION UMBER: US 60/067,341

FILING DATE: 02-DEC-1997

ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            68.7%;
Local Similarity 63.2%;
es 12; Conservation
                                                                                                                                                           REFERENCE/DOCKET NUMBER:
TELECOMMUNICATION INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 SOFTWARE: Patentin Release #1.0, Version #1.30 CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/09/791,578
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               CORRESPONDENCE ADDRESS:
ADDRESSEE: STERNE, KESSLER, GOLDSTEIN & FOX P.L.L.C.
STREET: 1100 NEW YORK AVENUE, SUITE 600
                                                                           SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  APPLICANT: WHITLOW, MARC SHORR, ROBERT G.L.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         NUMBER OF SEQUENCES:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TITLE OF INVENTION: POLYALKYLENE OXIDE-MODIFIED SINGLE CHAIN
POLYPEPTIDES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       174 TGCTGAAAACCTCAACTTC 156
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             4 UGCUGAAAGCCUCGACUUC
                     TYPE: nucleic acid
STRANDEDNESS: both
                                                                                                                                                                                                 NAME: JORGE A. GOLDSTEIN REGISTRATION NUMBER: 29,021
                                                                                                                                                                                                                                                                                                                                                                                                                                             FILING DATE: 26-Feb-2001
CLASSIFICATION: <Unknown>
TOPOLOGY: both
                                                        LENGTH: 723 base pairs
                                                                                                                   TELEFAX: 202-371-2540
                                                                                                                                           TELEPHONE: 202-371-2600
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                OPERATING SYSTEM: PC-DOS/MS-DOS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     COMPUTER: IBM PC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ITY: WASHINGTON
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                20005
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   USA
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               compatible
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Pred. No. 1.
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                                                                                                                                                                              0977.1840002
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                                                                      ; SEQUENCE DESCRIPTION: US-09-791-540-5
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Query Match
Best Local Similarity
Query Match 68.7%;
Best Local Similarity 63.2%;
Matches 12; Conservative
                                                                                                                                                                                                                                                   TELEFAX: 202-371-2540 INFORMATION FOR SEQ ID NO: 5:
                                                                                                                                                                                                                                                                                                                                                                        APPLICATION NUMBER: 09/069,842
FILING DATE: 1998-04-30
APPLICATION NUMBER: US 60/050,472
FILING DATE: 23-UN-1997
APPLICATION NUMBER: US 60/063,074
FILING DATE: 27-OCT-1997
APPLICATION NUMBER: US 60/067,341
FILING DATE: 02-DEC-1997
APPLICATION NUMBER: US 60/067,341
FILING DATE: 02-DEC-1997
ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ZIP: 20005
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     NAME/KEY: CDS
LOCATION: 1..723
SEQUENCE DESCRIPTION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CORRESPONDENCE ADDRESS:
ADDRESSEE: STERNE, KESSLER, GOLDSTEIN &
STREET: 1100 NEW YORK AVENUE, SUITE 600
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TITLE OF INVENTION: POLYALKYLENE OXIDE-MODIFIED SINGLE CHAIN POLYPEPTIDES
                                                                                                                                                                                                                                                                                                 NAME: JORGE A. GOLDSTEIN
REGISTRATION NUMBER: 29,021
REFERENCE/DOCKET NUMBER: 0977.1840002
TELECOMMUNICATION INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        PRIOR APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              CURRENT APPLICATION DATA:
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                                                                                                                                                                                                                                    SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            NUMBER OF SEQUENCES:
                                                                                                                                              FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            332 TGCTGAAAGGCTCTACTTC 350
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.30
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         APPLICATION NUMBER: US/09/791,540 FILING DATE: 26-Feb-2001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      CITY: WASHINGTON
                                                                                                           NAME/KEY: CDS
LOCATION: 1...
                                                                                                                                                                               TYPE: nucleic acid STRANDEDNESS: both
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CLASSIFICATION: <Unknown>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      COUNTRY:
                                                                                                                                                              TOPOLOGY: both
                                                                                                                                                                                                                LENGTH: 723 base pairs
                                                                                                                                                                                                                                                                                      TELEPHONE: 202-371-2600
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               WHITLOW, MARC
SHORR, ROBERT G.L.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              FILPULA, DAVID R.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      USA
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                                                                                                           1..723
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                                                                                          SEQ
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Pred. No. 1.4e
5; Mismatches
   Score 15.8; DB 10;
Pred. No. 1.4e+02;
5; Mismatches 2;
                                                                                          ID NO:
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1.4e+02;
2;
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L.4e+02;
hes 2;
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                                    Length 723;
     Indels
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     Gaps
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RESULT 13
US-09-956-086-1
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                                                                                                                                      SEQUENCE DESCRIPTION: SEQ ID US-09-956-086-1
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                                                                        Best Loc
Matches
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                                                                                       Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                   TELEFAX: (202)371-2540 INFORMATION FOR SEQ ID NO: 1:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFFWARE: Patentin Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/09/956,086
FILING DATE: 20-Sep-2001
CLASSIFICATION: <Unknown>
                                                                                                                                                                                                                                                                                                                                                                                                                                               APPLICATION NUMBER: US 60/044,449
ETILING DATE: 30-APR-1997
ATTORNEY/AGENT INFORMATION:
NAME: KIM, JUDITH U.
REGISTRATION NUMBER: 40,679
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              CORRESPONDENCE ADDRESS:
ADDRESSEE: STERNE, KESSLER, GOLDSTEIN & FOX P.L.L.C.
STREET: 1100 NEW YORK AVE., NW, SUITE 600
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        APPLICANT: FILPULA, DAVID WANG, MAOLIANG SHORR, ROBERT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TITLE OF INVENTION: SINGLE-CHAIN ANTIGEN-BINDING PROTEINS
CAPABLE OF GLYCOSYLATION, PRODUCTION AND USES THEREOF
                                                                                                                                                                                                                        MOLECULE TYPE: cDNA FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                              TELECOMMUNICATION INFORMATION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          PRIOR APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                NUMBER OF SEQUENCES:
                                                                                                                                                                                                                                                                                                                                      SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                332 TGCTGAAAGGCTCTACTTC 350
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332 TGCTGAAAGGCTCTACTTC 350
                                   4 UGCUGAAAGCCUCGACUUC 22
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                                                                                                                                                                                   NAME/KEY: CDS
LOCATION: 1...
                                                                                                                                                                                                                                                                               TYPE: nucleic acid
STRANDEDNESS: both
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FILING DATE: 27-OCT-1997
APPLICATION NUMBER: US 60/050,472
FILING DATE: 23-JUN-1997
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       APPLICATION NUMBER: 09/069,821 FILING DATE: <Unknown>
                                                                                                                                                                                                                                                                                                                                                                                                                               REFERENCE/DOCKET NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                              TELEPHONE: (202)371-2600
                                                                                                                                                                                                                                                             ropology: both
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LEE, LIHSYNG S.
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Pred. No. 1
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NAME/KEY: CDS
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LOCATION: 1..747
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SEQUENCE DESCRIPTION: SEQ ID NO: 1:
US-09-956-087-1
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US-09-985-442-1
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US-09-956-087-1
                                                                                                                                                                                                                                                    Query Match
Best Local Similarity
Matches 12; Conserv
                   Sequence 1, Application US/09985442 Patent No. US20020156248A1 GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Sequence 1, Application US/09956087 Patent No. US20020161201A1 GENERAL INFORMATION:
APPLICANT: Filpula, David R.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           REFERENCE/DOCKET NUMBER:
TELECOMMUNICATION INFORMATION:
TELEPHONE: (202)371-2600
TELEFAX: (202)371-2540
INFORMATION FOR SEQ ID NO: 1:
SEQUENCE CHARACTERISTICS:
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MEDIUM TYPE: Floppy disk
COMPUTER: IEM PC compatible
OPERATING SYSTEM: PC-POS/MS-DOS
SOFTMARE: Patentin Release #1.0, Version #1.30
CURRENT APPLICATION NUMBER: US/09/956,087
FILING DATE: 20-Sep-2001
CLASSIFICATION INDER: US/09/956,087
FILING DATE: 19-96-9821
APPLICATION NUMBER: 09/069,821
FILING DATE: 1998-04-30
APPLICATION NUMBER: US/09/063,074
FILING DATE: 27-OCT-1997
APPLICATION NUMBER: US/09/063,074
FILING DATE: 27-OCT-1997
APPLICATION NUMBER: US/09/050,472
FILING DATE: 23-JUN-1997
APPLICATION NUMBER: US/09/064,449
FILING DATE: 30-APR-1997
APPLICATION NUMBER: US/09/044,449
FILING DATE: 30-APR-1997
APPLICATION NUMBER: US/09/044,449
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ATTORNEY/AGENT INFORMATION:
NAME: KIM, JUDITH U
REGISTRATION NUMBER: 40,679
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           NUMBER OF SEQUENCES: 33
CORRESPONDENCE ADDRESS:
ADDRESSEE: STERRE, KESSLER, GOLDSTEIN & FOX P.L.L.C.
STREET: 1100 NEW YORK AVE., NW, SUITE 600
                                                                                                                                                                                                                                                                                                                                                                                                                                 MOLECULE TYPE: cDNA FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TITLE OF INVENTION: SINGLE-CHAIN ANTIGEN-BINDING PROTEINS

CAPABLE OF GLYCOSYLATION, PRODUCTION AND USES THEREOF
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   APPLICANT:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TYPE: nucleic acid
STRANDEDNESS: both
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STATE: DC
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                                                                                                                                                                                                                                                            Conservative
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WANG, MAOLIANG
SHORR, ROBERT
                                                                                                                                                                                                                                                                              68.7%;
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Pred. No. 1.4e+02;
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; LOCATION: (1)..(771)
US-09-985-442-1
                                                                                  Query Match 68.7%;
Best Local Similarity 63.2%;
Matches 12; Conservative
                                                                                                                                                                                                                                                                                                                                                               SOFTWARE: PatentIn Ver. 2.1 SEQ ID NO 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    APPLICANT: Wang, Macliang
APPLICANT: Whitlow, Marc D.
TITLE OF INVENTION: NO. US20020156248A1el Method for Targeted Delivery of Nucleic FILE REFERENCE: 0977.2300003
CURRENT APPLICATION NUMBER: US/09/985,442
CURRENT FILING DATE: 2001-11-02
PRIOR APPLICATION NUMBER: 09/420,592
PRIOR APPLICATION NUMBER: 09/420,592
PRIOR FILING DATE: 1399-10-19
PRIOR FILING DATE: 1399-10-19
                                                                                                                                                                                                                                                                                                                                                                                                       PRIOR APPLICATION NUMBER: 60/104,949
PRIOR FILING DATE: 1998-10-20
NUMBER OF SEQ ID NOS: 13
                                                                                                                                                                                                                                                                                      LENGTH: 782
TYPE: DNA
ORGANISM: Artificial Sequence
                                                                                                                                                                                                                                       OTHER INFORMATION: Description of Artificial Sequence: CC49/218 sfv
                                                                                                                                                                                                                                                                          FEATURE:
332 TGCTGAAAGGCTCTACTTC 350
                                          4 UGCUGAAAGCCUCGACUUC 22
                                                                                       5; Mismatches
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Pred. No. 1
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Search completed: June 12, 2003, 04:58:53 Job time : 140.666 secs

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length: 2000000000
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23
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(without alignments)
441.227 Million cell updates/sec
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Copyright (c) 1993 - 2003 Compugen Ltd
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BF251708
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BF251964
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EST419073
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ALIGNMENTS

JOURNAL COMMENT REFERENCE AUTHORS TITLE ACCESSION VERSION KEYWORDS SOURCE ORGANISM RESULT 1 BF251708 LOCUS DEFINITION FEATURES source Department of Eukaryotic Genomics
The Institute for Genomic Research
9712 Medical Center Drive, Rockville,
Tel: 301 838 3519
Fax: 301 838 0208 Coccidioides immitis.
Coccidioides immitis.
Coccidioides immitis
Eukaryota; Fungi; Ascomycota; Pezizomycotina; Eurotiomycetes;
Eukaryota; Fungi; Ascomycota; Pezizomycotina; Eurotiomycetes;
Onygenales; mitosporic Onygenales; Coccidioides.

1 (bases 1 to 123)
Gardner, M. J. and Rirkland, T.
Generation of ESTs from Coccidioides immitis spherule cDNA library BF251708 123 bp mRNA linear EST 15-NOV-20 EST418892 Coccidioides immitis spherule cDNA library Coccidioides immitis cDNA clone CIAAK37 5' sequence, mRNA sequence. Unpublished (2000)
Contact: Malcolm J. Gardner BF251708.1 GI:16931774 Email: gardner@tigr.org. Location/Qualifiers /organism="Coccidioides immitis"
/db_xref="taxon:5501"
/clone="c1AAK37"
/clone_11b="Coccidioides immitis spherule cDNA library" ð 20850, USA EST 15-NOV-2001

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ACCESSION
VERSION
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DEFINITION
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AUTHORS
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BF251693
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Coccidioides immitis.
Coccidioides immitis
Coccidioides immitis
Eukaryota; Fungi; Ascomycota; Pezizomycotina; Eurotiomycetes;
Onygenales; mitosporic Onygenales; Coccidioides.
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                                                                                                    immitis cDNA
BF251811
                                                                                                          BF251811 362 bp mRNA linear EST 15-NOV-20 EST419073 Coccidioides immitis spherule cDNA library Coccidioides immitis cDNA clone CIAAM73 5' sequence, mRNA sequence.
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1 (bases 1 to 351)
Gardner, M.J. and Kirkland, T.
Generation of ESTs from Coccidioides immitis spherule cDNA li
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               9712 Medical Center Drive,
Tel: 301 838 3519
Fax: 301 838 0208
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Department of Eukaryotic Genomics
The Institute for Genomic Research
9712 Medical Center Drive, Rockville,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Unpublished (2000)
Contact: Malcolm J. Gardner
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BF251693.1 GI:16931759
                                                                                                                                                                                                                                                                                            Similarity
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llarity 65.2%;
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Location/Qualifiers
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                                                                                                                                                                                                                                                                                                                                                                                               /clone="CIAAK21"
/clone_lib="Coccidioides
/dev_stage="spherule"
/lab_host="SOLR"
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/db_xref="taxon:5501"
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/lab_host="SOLR"
/note="Vector: pBluescript SK(-);
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Pred. No. 56;
6; Mismatches
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Conservative

5

Mismatches

<u>ب</u>

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Gaps

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BF251964
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Coccidioides immitis.
Coccidioides immitis
Coccidioides immitis
Eukaryota; Fungi; Ascomycota; Pezizomycotina; Eu
                                                                                                                                                                                                                                   9712 Medical Center Drive, Rockville, Tel: 301 838 3519
Fax: 301 838 0208
                                                                                                                                                                                                                                                                                                                                                                                                                                          EST.
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Contact: Malcolm J. Gardner
                                                                                                                                                                                                                                                                                                                               1 (bases 1 to 377)
Gardner, M. J. and Kirkland, T.
Generation of ESTs from Coccidioides immitis spherule cDNA library
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             BF251964 377 bp mRNA EST419226 Coccidioides immitis spherule immitis cDNA clone CIAAP15 5' sequence,
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                                                                                                                                                                                                                                                                              Department of Eukaryotic Genomics
The Institute for Genomic Research
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The Institute for Genomic Research
9712 Medical Center Drive, Rockville,
Tel: 301 838 3519
Fax: 301 838 0208
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Unpublished (2000)
Contact: Malcolm J. Gardner
             Similarity
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Location/Qualifiers
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Gardner, M.J. and Ki
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                                                                                                                                                                                                gardner@tigr.org.
Location/Qualifiers
1. .377
                                                                                                             /clone_lib="Coccidioides immitis spherule cDNA library"
/dev_stage="spherule"
/lab_host="SOLR"
                                                                                                                                                     /organism="Coccidioides
/db_xref="taxon:5501"
/clone="CIAAP15"
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/dev_stage="spherule"
/lab_host="SOLR"
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/db_xref="taxon:5501"
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65.2%;
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Pred. No. 57;
6; Mismatches
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          Score 19.4;
Pred. No. 58;
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BF251561
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                                                                              Coccidioides immitis.

Coccidioides immitis.

Coccidioides immitis.

Eukaryota; Fungi; Ascomycota; Pezizomycotina; Eurotiomycetes;

Drygenales; mitosporic Onygenales; Coccidioides.

1 (bases 1 to 391)

Gardner, M. J. and Kirkland, T.

Generation of ESTs from Coccidioides immitis spherule cDNA library

Unpublished (2000)

Contact: Malcolm J. Gardner

Contact: Malcolm J. Gardner
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                                         Department of Eukaryotic Genomics
The Institute for Genomic Research
9712 Medical Center Drive, Rockville,
                                                                                                                                                                                                                                                                                                                                                                                                                   1 RCAUGCUGAAAGCCUCGACUUCG 23
                9712 Medical Center Drive,
Tel: 301 838 3519
Fax: 301 838 0208
                                                                                                                                                                                                                                                                           EST418910 Coccidioides immitis spherule immitis cDNA clone CIAAK57 5' sequence, BF251561
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15; Conserv
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1 (Dases 1 to 378)

Gardner, M. J. and Kirkland, T.

Generation of ESTs from Coccidioides immitis spherule cDNA li
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The Institute for Genomic Research
9712 Medical Center Drive, Rockville,
Tel: 301 838 3519
Fax: 301 838 0208
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Contact: Malcolm J
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Email: gardner@tigr.org.
Location/Qualifiers
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gardner@tigr.org
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/db_xref="taxon:5501"
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/lab_host="SOLR"
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Pred. No. 58;
6; Mismatches
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RESULT 8
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                                                                                                                       16;
                                                                                                                                                                                                                                                                                                                                              10 Gl. Carlsbergvej, DK-2500, Copenhagen, Denmark
Tel: 45 3327 5230
Fax: 45 3327 4766
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AW792005 486 bp mRNA linear EST 01-MAY-2001 D00948-R Lambda Zap, Stratagene Blumeria graminis f. sp. hordei cDNA clone D00948 similar to non-functional folate binding protein,
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                                                                                                                                                                                                                                                                                                                                                                                                Contact: Rasmussen, S.W.
Department of Yeast Genetics
                                                                                                                                                                                                                                                                                                                                                                                                                                     Gene identification in the fungal pathogen expressed sequence tag analysis
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Blumeria
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             15; Conserv
    BF251704
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10 Gl. Carlsbergvej,
                                                                                                                                                                                                                                                                                                                                                                                                                             Unpublished (2000)
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Blumeria graminis f. sp. hordei.
Blumeria graminis f. sp. hordei
Blumeria graminis f. sp. hordei
Elwaryota; Fungi; Ascomycota; Pezizomycotina; Leotiomycetes;
Eryslphales; Eryslphaceae; Blumeria.
1 (bases 1 to 486)
                                                                                                                                                                                                                                                                                                                                  Email: swr@crc.dk
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                                                                                                                                                                                 /clone_lib="Lambda Zap, Str:
/cell_type="conidia"
/lab_host="Hordeum vulgare"
101 c 115 g 132 t
                                                                                                                                                                                                                                      /organism="Blumeria graminis
/db_xref="taxon:62688"
/clone="D00948"
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/dev_stage="spherule"
/lab_host="SOLR"
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/db_xref="taxon:5501"
/clone="CIAAK57"
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Pred. No. 59;
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                                                                                                                                 Department of Eukaryotic Genomics
The Institute for Genomic Research
9712 Medical Center Drive, Rockville,
Tel: 301 838 3519
Fax: 301 838 0208
                                                                                                                                                                                                        Generation of ESTs from Coccidioides
Unpublished (2000)
Contact: Malcolm J. Gardner
                                                                                                                                                                                                                                                    Eukaryota; Fungi; Ascomycota; Pezizomycotina; Eurotiomycetes; onygenales; mitosporic Onygenales; Coccidioides.

1 (bases 1 to 502)

Gardner, M. J. and Kirkland, T.
                                                                                                                                                                                                                                                                                                             Coccidioides immitis.
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Department of Eukaryotic Genomics
The Institute for Genomic Research
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Gardner, M.J. and Kirkland, T.
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Eukaryota; Fung1; Ascomycota; Pezizomycotina; Eurotiomycetes;
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                                                                                                    gardner@tigr.org.
Location/Qualifiers
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Location/Qualifiers
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                                           /organism="Coccidioides
/db_xref="taxon:5501"
/clone="CIAAY35"
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/dev_stage-"spherule"
/lab_host-"SOLR"
/clone_lib="Coccidioides immitis spherule cDNA library"
/dev_stage="spherule"
/lab_host="SOLR"
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/db_xref="taxon:5501"
/clone="CIAAK33"
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57 ACATGCTAAAAAACCTCGACTTCG 179
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Blumeria graminis f. sp. hordei
Blumeria graminis f. sp. hordei
Eukaryota; Fungi; Ascomycota; Pezizomycotina; Leotiomycetes;
Erysiphales; Erysiphaceae; Blumeria.
1 (bases 1 to 515)
Coccidioides immitis.
Coccidioides immitis
Eukaryota; Fungi; Asc
                                                                                                    BF251715 518 bp mRNA EST418899 Coccidioides immitis spherule immitis cDNA clone CIAAK45 5' sequence,
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Contact: Rasmussen, S.W.
Department of Yeast Genetics
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                                                                   BF251715
BF251715.1 GI:16931781
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Email: swr@crc.dk
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Carlsberg Laboratory
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/cell_type="conidia"
/lab_host="Hordeum vulgare"
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/db_xref="taxon:62688"
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EST419633 Coccidioides immitis spherule cDNA library C
immitis cDNA clone CIAAV41 5' sequence, mRNA sequence.
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     l Similarity
15; Conserv
                                                                                                                                                                                                                                                                         Department of Eukaryotic Genomics.
The Institute for Genomic Research
9712 Medical Center Drive, Rockville,
                                                                                                                                                                                                                                                                                                                                            Onygenales; mitosporic Onygenales; Coccidioides.

1 (bases 1 to 541)

Gardner, M.J. and Kirkland, T.

Generation of ESTs from Coccidioides immitis spherule cDNA library
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1 (bases 1 to 518)
Gardner, M.J. and Kirkland, T.
Generation of ESTs from Coccidioides immitis spherule cDNA library
                                                                                                                                                                                                                                                                                                                      Unpublished (2000)
Contact: Malcolm J. Gardner
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BF252371.1
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Location/Qualifiers
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Unpublished (2000)
Contact: Malcolm J. Gardner
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Location/Qualifiers
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                                                                                                                 /clone_lib="Coccidioides immitis spherule cDNA library"
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Onygenales; mitosporic Onygenales; Cocci (bases 1 to 567)
1 (bases 1 to 567)
Gardner, M.J. and Kirkland, T.
Generation of ESTs from Coccidioides im Unpublished (2000)
Contact: Malcolm J. Gardner Department of Eukaryotic Genomics The Institute for Genomic Research 9712 Medical Center Drive, Rockville, MTel: 301 838 3519
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Other_ESTs: EST445665
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A linear ES e cDNA library C , mRNA sequence.

EST 15-NOV-2001 Coccidioides

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Coccidioides immitis.
Coccidioides immitis
Coccidioides immitis
Eukaryota; Fungi; Ascomycota; Pezizom
Onygenales; mitosporic Onygenales; Co
Onygenales; mitosporic Onygenales; Co
Ongenales; mitosporic Onygenales; Co
Gases 1 to 546)
Gardner, M.J. and Kirkland, T.
Generation of ESTs from Coccidioides
                                                                                                                                                             Contact: Malcolm J. Gardner
Department of Eukaryotic Genomics
The Institute for Genomic Research
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Email: gardner@tigr.org.
Location/Qualifiers
                                                                                                                                   9712 Medical Center Drive, Rockville,
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Coccidioides immitis.

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Eukaryota; Fungi; Ascomycota; Pezizomycotina; Eurotiomycetes;

Eukaryota; Fungi; Ascomycota; Coccidioides.

Onygenales; mitosporic Onygenales; Coccidioides.

1 (bases 1 to 568)

Gardner, M. J. and Kirkland, T.

Generation of ESTs from Coccidioides immitis spherule cDNA library
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568 bp mRNA linear EST 15-NOV-2001 EST420141 Coccidioides immitis spherule cDNA library Coccidioides immitis cDNA clone CIABB92 5' sequence, mRNA sequence.
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Contact: Malcolm J. Gardner
Department of Eukaryotic Genomics
The Institute for Genomic Research
9712 Medical Center Drive, Rockville, MD 20850, USA
Tel: 301 838 3519
Fax: 301 838 0208
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Email: gardner@tigr.org.
Location/Qualiflers
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Pred. No. is the number of results predicted by chance to have a

score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

RESULT 1 HCC18SRRN/c LCCUS DEFINITION ACCESSION VERSION KEYWORDS SOURCE ORGANISM REFERENCE AUTHORS TITLE	•	υ 4	C 43	41	40 ·	ω (0 00 ·	36 37	ω u	3 33	3 2 2 1	30	200	27 2	25 #	22	22 2	20 2	18	17 2	15	13 2 2	12 2	110	9	8 \ 2 \	5 2	ທ.ສ ພ		ი ი 21	No. Sc	
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       17; Conserv
                                                                                                                                                                                                          Submitted (06-JUL-1996) Reinhard Kappe, Hygiene & Med.
Microbiology, University of Heidelberg, Hygiene Institute,
Neuenheimer Feld 324, Heidelberg, D-69120, Germany
                                                                                                                                                                                                                                                                                                                                     Okeke, C.N., Kappe, R., Zakikhani, S., Nolte, O. and Sonntag, H.G. Ribosomal genes of Histoplasma capsulatum var. duboisii and var.
                                                                                                                                                                                                                                                                                                                                                           Eukaryota; Fungi; Ascomycota; Pezizomycotina; Eurotiomycetes; Onygenales; Onygenaceae; Ajellomyces.

1 (bases 1 to 1704)
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Ajellomyces capsulatus
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33 CGAAGTCGAGGCTTTCAGCATG 112
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18S ribosomal RNA; 18S rRNA gene; small subunit ribosomal
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                                                                                          /gene="18S rRNA"
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/sub_species="dubolsii"
/db_xref="taxon:5037"
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133 CGAAGTCGAGGCTTTCAGCATG
                                                          Ajellomyces capsulatus.
Ajellomyces capsulatus
Eukaryota; Fungi; Ascomycota;
Onygenales; Onygenaceae; Ajellomyces.

1 (bases 1 to 1726)

Kasuga,T., White,T.J. and Taylor,J.W.
The Molecular Clock in Fungi in the C
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AF320009
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Ajellomyces
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Ajellomyces capsulatus
Bukaryota; Pungi; Ascomycota; Pezizomycotina;
Conygenales; Onygenaceae; Ajellomyces.
1 (bases 1 to 1713)
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3 (bases 1 to 1713)
3 (bases 1 to 1713)
Berbee,M.L. and Taylor,J.W.
Berbee,M.L. and Taylor,J.W.
Convergence in ascospore discharge mechanism among pyrenomycete fungi based on 18S ribosomal RNA gene sequence
"-" "bvlogenet. Evol. 1 (1), 59-71 (1992)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Submitted (19-MAR-1991) B.H. Bowman, Roc Atlantic Avenue, Alameda CA 94501, USA 2 (bases 1 to 1713)
Bowman, B.H., Taylor, J.W. and White, T.J. Molecular evolution of the fungi: human Mol. Biol. Evol. 9 (5), 893-904 (1992)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Annotation
                                                                                                                                                                                                                                                                                                                                                 Similarity
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Direct Submission
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/strain="ATCC 11408"
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Shintani, T. and Matsumoto, Y.
Aspergillus niger gene for 18S rRNA, partial sequence published Only in DataBase (1999)
Chases 1 to 494)
Shintani, T. and Matsumoto, Y.
Direct Submission
Submitted (10-AUG-1999) Tomoyoshi Shintani, Industrial Researd Submitted (10-AUG-1999) Tomoyoshi Shintani, Industrial Researd
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             2 (bases 1 to 1726)
Kasuga, T., White, T.J. and Taylor, J.W.
Direct Submission
                                                                                                                                                                                                                                                                                                                     Center of Ehime Prefecture, Laboratory of Food Process; 487-2 Kumekubota, Matsuyama, Ehime 791-1101, Japan (E-mail:shintani@iri.pref.ehime.jp, URL:www.iri.pref.ehime.jp, Tel:81-89-976-7612, Fax:81-89-976-7313)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Aspergillus niger (strain:IEF1) DNA.
Aspergillus niger
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Aspergillus niger gene
AB030916
                                                                                                                      N
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AF088252 786 bp Teloschistes cf. chrysophthalmus ribosomal RNA, partial sequence.
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CGAAGTCGAGGTTTTCAGCATG 150
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/strain="ANCC26032; G217B"
/db_xref="ANCC:26032"
/db_xref="taxon:5037"
/note="class 2 North American populat
<1. .>1726
                                                                                                                                                                                                                                       /organism="Aspergillus niger"
/strain="IEFI"
/db_xref="taxon:5061"
<1. >494
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  /product="18S ribosomal RNA" 371 c 475 g 440 t
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100 c 121 g 131 t
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77.38;
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72.7%;
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; Pred. No. 11;
5; Mismatches
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Pred. No. 1.8;
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rRNA, partial sequence.
              DNA
Feige
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                ESS-6640 18S
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                            PLN 17-JUN-1999
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TITLE
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ORGANISM
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ORGANISM
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AF113712/c
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 Query Match
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AF113712
AF113712.1
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16; Conserv
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ACCESSION
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2 (bases 1 to 786)
DePriest, P.T., Ivano
Direct Submission
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Teloschistes cf. chrysophthalmus Feige and Mies ESS-6640.
Teloschistes cf. chrysophthalmus Feige and Mies ESS-6640
Eukaryota; Fungi; Ascomycota; Pezizomycotina; Lecanoromycetes;
Lecanorales; Teloschistineae; Teloschistaceae; Teloschistes.
1 (bases 1 to 786)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Submitted (31-AUG-1998) Department of Botany, NHB-166, Smithsonian Institution, National Museum of Natural History, 10th & Constitution Avenue NW, Washington, DC 20560-0166, USA Location/Qualifiers
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AF088252.1
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Submitted (16-DEC-1998) Department of Botany & Plant Pathology, Submitted (16-DEC-1998) Cordley Hall, Corvallis, OR
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                                                                                                                                                                                                                                                                      2 (bases 1 to 969)
Platt, J.L. and Spatafora, J.W.
                                                                                                                                                                                                                                                                                                                               platt, J.L. and Spatafora, J.W. Evolutionary relationships of nonsexual lichenized phylogenetic hypotheses for the genera Siphula and SSU and LSU rDNA analyses
                                                                                                                                                                                                                                                                                                                                                                                                                             Eukaryota; Fungi; Ascomycota; Pezizomycotina; Lecanoromycetes; Lecanoromycetes incertae sedis; Icmadophilaceae; Dibaeis.
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Dibaeis baeomyces small subunit
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ESS-6640"
                                                                                              /organism="Dibaeis bacomyces"
/db_xref="taxon:83478"
<1. .>969
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                /product="18S ribosomal RNA"
/note="small subunit ribosomal RNA"
161 c 198 g 219 t
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<1. .>786
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/db_xref="taxon:88650"
                                                                                                                                                           1. .969
                                                         /product="small subunit ribosomal RNA"
189 c 243 g 268 t 1 oth
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  88.7%;
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Pred. No. 12;
5; Mismatches
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Length 969
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Thamnolia from
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partial
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8;

Length 1031;

RNA"

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Indels

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Gaps

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PLN 14-OCT-1999 partial sequence.

Aspergillus.

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SOURCE
ORGANISM
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AF203458/c
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AUTHORS
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VERSION
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AF107345/c
                                             TITLE
JOURNAL
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Best Local S
Matches 16
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                                                                                                                                                                TITLE
                                                                                               AUTHORS
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                     117
                                                               Eukaryota; Fungi; Ascomycota; Pezizomycotina; Leotiomycetes; Rhytismatales; Rhytismataceae; Cyclaneusma.

1 (bases 1 to 1031)
Gernandt, D.S., Platt, J.L., Stone, J.K., Spatafora, J.W., Holst-Jensen, A., Hamelin, R.C. and Kohn, L.M.
Phylogenetics of Helotiales and Rhytismatales based on partismall subunit nuclear ribosomal DNA sequences Mycologia 93 (5), 915-933 (2001)

2 (bases 1 to 1031)
Gernandt, D.S., Platt, J.L., Stone, J.K., Spatafora, J.W., Holst-Jensen, A., Hamelin, R.C. and Kohn, L.M.
Direct Submission
Direct Submission
Submitted (12-NOV-1999) Department of Botany and Plant Pathology,
Submitted University, 2082 Cordley Hall, Corvallis, OR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          128 CGAAGTCGAGGTTTTCAGCATG 107
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|||||:|||||:::|||||:|
17 CGAAGTCGAGGTTTTCAGCATG 96
                                                                                                                                                                                                                                                                Cyclaneusma minus.
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Cyclaneusma
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                                                                                                                                                                                                                                                                                                                                     sequence.
AF203458
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Platt, J.L. and Spatafora, J.W.
Direct Submission
Submitted (18 NOV-1998) Botany
University, 2082 Cordley Hall,
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Lecanoromycetes incertae sedis; Icmadophilaceae; Dibaeis.

(bases 1 to 990)

Platt, J.L., Camacho, F.J. and Spatafora, J.W.

Evolution of the lichen symbiosis within the Leotiales; molecular phylogenetic hypotheses for Dibaeis and Baeomyces

Unpublished
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Dibaeis baeomyces small
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llarity 72.7%;
Conservative
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189 c 248 g 284 t
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/isolate="OSC56400"
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Pred. No. 12;
5; Mismatches
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Corvallis, OR 97331, USA
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S Shintani,T. and Matsumoto,Y.
Aspergillus awamori gene for 185 rRNA, partial sequence
L Published Only in DataBase (1999)
E 2 (bases 1 to 1054)
S Shintani,T. and Matsumoto,Y.
S Shintani,T. and Matsumoto,Y.
S Shintani,T. and Matsumoto,Y.
S Shintani,T. and Matsumoto,Y.
Center of Ehime Prefecture, Laboratory of Food Process; 487-2
Kumekubota, Matsuyama, Ehime 791-1101, Japan
(E-mail:shintani@iri.pref.ehime.jp, URL:www.iri.pref.ehime.jp,
Tenail:shintani@iri.pref.ehime.jp, URL:www.iri.pref.ehime.jp,
Tenail:shintani@iri.pref.ehime.jp, URL:www.iri.pref.ehime.jp,
Tenail:shintani@iri.pref.ehime.jp, URL:www.iri.pref.ehime.jp,
Tenail:shintani@iri.pref.ehime.jp, URL:www.iri.pref.ehime.jp,
Tenail:shintani@iri.pref.ehime.jp, URL:www.iri.pref.ehime.jp,
Tenail:shintani@iri.pref.ehime.jp, URL:www.iri.pref.ehime.jp,
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Amylocarpus encephaloides
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55 CGAAGTCGAGGTTTTCAGCATG 134
            Amylocarpus encephaloides 
Amylocarpus encephaloides
                                                                 U45438.1 GI:1736923
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16; Conservative
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18S rRNA; 18S ribosomal RNA.
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11. >1054
/product-"185 ribosomal RNA"
215 c 274 g 277 t
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/db_xref="taxon:64355"
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/strain="93197"
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Landvik, S., Shailer, N.F.J. and Eriksson, O.E.
SSU rDNA sequences support for a close relat:
Elaphomycetales and the Eurotiales and Onyge:
Mycoscience 37, 237-241 (1996)
2 (bases 1 to 1479)
Landvik, S., Shailer, N.F.J. and Eriksson, O.E.
1673 bp
A.niger (isolate CBS102.12) 18S
X78538
X78538.1 GI:469079
                                                                                                                                                                                                                                                                                                                                 Stenroos,S., Lohtander,K. and Tehler,A.
Direct Submission
Submitted (27-SEP-1996) Botany, National Museum of Natural History,
Smithsonian Institution, NHB-166, 10th St. & Constitution Ave.,
Washington, DC 20560, USA
                                                                                                                                                                                                                                                                                                                                                                                                                            Siphula ceratites.
Siphula ceratites
Siphula ceratites
Eukaryota; Fungl; Ascomycota;
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                                                                                                                                         2 CGAAGUCGAGGCUUUCAGCAUG 23
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U72712
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1 (bases 1 to 1648)
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/strain="UME 29765"
                                                                                                                                                                                                                                       /product="18S small subunit ribosomal RNA"
343 c 442 g 439 t
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/db_xref="taxon:53373"
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Aspergillus niger
Eukaryota; Fungi; Ascomycota; Pezizomycotina; Eurotiomycetes;
Eurotiales; Trichocomaceae; mitosporic Trichocomaceae; Aspergillus.
1 (bases 1 to 1673)
1 (bases 1 to 1673)
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31 CGAAGTCGAGGTTTTCAGCATG 11
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Submitted (25-MAR-1994) W.J.G. Melchers, Department of Medical Microbiology, University of Nijmegen, P O Box 9101, 6500 HB Nijmegen, NETHERLANDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Melchers, W.J., Verweij, P.E., van den Hurk, P., van Belkum, A., De Pauw, B.E., Hoogkamp-Korstanje, J.A. and Meis, J.F. General primer-mediated PCR for detection of Aspergillus species J. Clin. Microbiol. 32 (7), 1710-1717 (1994)
                                                                                                                                                                                                                                                                                                                                                                                   Paecilomyces variotii.
Paecilomyces variotii.
Paecilomyces variotii.
Eukaryota; Fungi; Ascomycota; Pezizomycotina; Eurotiomycetes;
Eurotiales; Trichocomaceae; mitosporic Trichocomaceae;
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                                                                                                                                                                                                                    Submitted (24-JUN-1997) Kappe R., Hygiene Institute, Heidelberg, Im Neuenheimer Feld 324 D-69120 GERMANY
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Paecilomyces variotii 185 rRNA gene
Y13996
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                                                                                                                                                                                                                                                   Direct Submission
                                                                                                                                                                                                                                                                     Kappe, K.
                                                                                                                                                                                                                                                                                                                    Zakikhani, S., Okeke, C
18S rDNA sequence of
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(bases 1 to 1678)
(bases 1, Okeke,C.N. and Kappe,R.
kikhani,S., Okeke,C.N. and Kappe,R.
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/isolate="CBS102.12"
/db_xref="taxon:5061"
<1. .>1673
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/evidence=experimental
365 c 458 g 426 t
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1. .1673
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1. .1678
                                                                                                                                                 /organism="Paecilomyces
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                                                                                                                                                                                  Location/Qualifiers
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363 c 467 g
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                                                                                                                /isolate="Man, sputum"
/db_xref="taxon:45996"
                               product="18S ribosomal RNA"
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5; Mismatches
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Search completed: June 12, 2003, 02:33:54 Job time: 348.269 secs
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128 CGAAGTCGAGGTTTTCAGCATG 107
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105 CGAAGTCGAGGTTTTCAGCATG 84
                                                                                                                                                                                                                                                                                                                                                                                                           2 (bases 1 to 1686) .
Platt, J.L. and Spatafora, J.W.
Direct Submission
Submitted (16-DEC-1998) Department of Botany & Plant Pathology, Oregon State University, 2082 Cordley Hall, Corvallis, OR 97331-2902, USA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Eukaryota; Fungi; Ascomycota; Pezizomycotina; Lecanoromycetes; Lecanoromycetes incertae sedis; Icmadophilaceae; Dibaeis.

1 (bases 1 to 1686)

Platt, J.L. and Spatafora, J.W.

Evolutionary relationships of nonsexual lichenized fungi: molecular phylogenetic hypotheses for the genera Siphula and Thamnolia from SSU and LSU rDNA analyses

Unpublished
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1686 bp DNA linear PLN 06-DEC-1999
Dibaels baeomyces isolate OSC53939 small subunit ribosomal RNA
gene, partial sequence.
AF113713
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Dibaeis bacomyces
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                                                                                                                                                                                                                                                                                     /organism="Dibaeis baeomyces"
/isolate="OSC53939"
/db_xref="taxon:83478"
<1. >1686
                                                                                                                                                                                                                                                                                                                                                                        1. .1686
                                                                                                                                                                                                                                                /product="small subunit ribosomal RNA"
346 c 438 g 460 t 1 othe
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Maximum Match 100%
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Maximum DB seq length: 2000000000
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Copyright (c) 1993 - 2003 Compugen Ltd
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RESULT 1
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ID AAQ77
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AC AAQ7
XX H1st
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KW Sacc
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XX Milliman CL; Probe; detection; Histoplasma capsulatum; 18S; rRNA; rDNA; hybridisation; Saccharomyces cerevisiae; fungus; phylogenetic; helper probe; soil; water; Blastomyces dermatitidis; quantitation; sample; body fluid; ss. Histoplasma capsulatum-specific DNA hybridisation probe. AAQ73433 standard; DNA; 22 28-JUN-1991; 28-JUN-1991; 04-OCT-1994. US5352579-A. Synthetic. 18-MAY-1995 (first entry) (GENP-) GEN-PROBE INC AAQ73433; 91US-0720587 91US-0720587 ВP

Hybridisation probe specific for Histoplasma capsulatum - allowing differentiation from all other fungi for detection or

WPI; 1994-316178/39.

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A probe (AAQ73433) or its complement (AAQ73436) and corresponding RNA sequences (AAQ73437 and AAQ86436) used for the specific detection of all strains of Histoplasma capsulatum (H.C.). The probes are manufactured complementary to the H.C. 18s TRNA or TDNA gene. This region also corresponds to the bases 172-193 of Saccharomyces cerevisiae 18S TRNA. The probe is specific for H.C. and can be used to distinguish the funguest from all others, even its nearest phylogenetic neighbour Blastomyces dermatitidis. Nucleic acid hybridisation of the specific probe is enhanced by the use of helper probes (AAQ73434-5). This method allows the detection and/or the quantitation of H.C. from samples e.g. body
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Hybridisation probe specific for Histoplasma capsulatum allowing differentiation from all other fungi for detection that the second sec
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                                                                                                                                   A probe (AAQ73433) or its complement (AAQ73436) and corresponding RNA sequences (AAQ73437 and AAQ86436) used for the specific detection of all strains of Histoplasma capsulatum (H.C.). The probes are manufactured complementary to the H.C. 18s IRNA or IDNA gene. This region also corresponds to the bases 172-193 of Saccharomyces cerevisiae 18S IRNA. The probe is specific for H.C. and can be used to distinguish the fungus from all others, even its nearest phylogenetic neighbour Blastomyces dermatitidis. Nucleic acid hybridisation of the specific probe is enhanced by the use of helper probes (AAQ73434-5). This method allows the detection and/or the quantitation of H.C. from samples e.g. body
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       fluids, tissue samples, soil and water.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Histoplasma
                                                                                                                                                                                                                                                                             Claim 9; Column 12-13; 8pp; English.
                                                                                                                                                                                                                                                                                                    quantitation in body fluids, etc.
                                                                                                                                                                                                                                                                                                                   Hybridisation probe specific for Histoplasma capsulatum - allowing differentiation from all other fungi for detection
                                                                                                                                                                                                                                                                                                                                                     WPI; 1994-316178/39
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                04-OCT-1994.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Synthetic.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Probe; detection; Histoplasma capsulatum; 18S; rRNA; rDNA; hybridisation; Saccharomyces cerevisiae; fungus; phylogenetic; helper probe; soil; water; Blastomyces dermatitidis; quantitation; sample; body fluid; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                18-MAY-1995
                                                                                                 Sequence
                                                                                                                                                                                                                                                                                                                                                                                Milliman CL
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                                                            Local
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17; Conserv
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                                                                                                                      tissue samples, soil and
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                         CGAAGUCGAGGCUUUCAGCAUG 23
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        capsulatum-specific RNA
                                                                                                    BP; 5 A; 7 C; 5
                                                   Conservative
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77.3%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                7 C;
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77.3%;
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Pred. No.
                                                                                                    G; 5 U; 0
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RESULT 5
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ID AAF115
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AAF115
AC AAF115
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DT 13-MAR
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DT 13-MAR
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Multip
KW Multip
KW expres
KW Asperg
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XX
ACC AAQ8
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ACC AAQ8
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DT 18-M
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PTOB
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OX SYNT
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Best Local
Multiple gene expression; filamentous fungal cell; EST; expressed sequence tag; Fusarium venenatum; Aspergillus niger; Aspergillus oryzae; Trichoderma reesei; identification; recombination; culture condition; environmental stress; spore morphogenesis; metabolic pathway engineering; catabolic pathway engineering; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   A probe (AAQ73433) or its complement (AAQ73436) and corresponding RNA sequences (AAQ73437 and AAQ86436) used for the specific detection of all strains of Histoplasma capsulatum (H.C.). The probes are manufactured corresponds to the H.C. 18s TRNA or TDNA gene. This region also corresponds to the bases 172-193 of Saccharomyces cerevisiae 185 rRNA. The probe is specific for H.C. and can be used to distinguish the fungus from all others, even its nearest phylogenetic neighbour Blastomyces dermatitidis. Nucleic acid hybridisation of the specific probe is enhanced by the use of helper probes (AAQ73434-5). This method allows the detection and/or the quantitation of H.C. from samples e.g. body
                                                                                                                                                                                                 Aspergillus
                                                                                                                                                                                                                                                           13-MAR-2001
                                                                                                                                                                                                                                                                                                                        AAF11545;
                                                                                                                                                                                                                                                                                                                                                                         AAF11545 standard; cDNA; 568
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Hybridisation probe specific for Histoplasma capsulatum allowing differentiation from all other fungi for detect quantitation in body fluids, etc.
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                                                                                                                                                                                              niger EST SEQ ID NO:4068
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                                                                                                                                                                                                                                                        (first entry)
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AC AAZOO8
AC AAZOO8
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DT 11-OCT
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DE A. fum
XX
KW Invasi
XX

A. fumigatus 11-OCT-1999 AAZ00859;

18S TRNA DNA

(first entry)

Detection; diagnosis; 18S rRNA; aspergillosis; oncology; invasive infection; haematology; immune system suppression;

RESULT 6

AAZ00859 standard;

DNA; 1733

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                                                                                                                                                                                             The present invention describes a method for monitoring differential compression of genes in a first filamentous fungal (FF) cell relative to expression of the same genes in one or more second filamentous fungal cells. The method uses fluorescence-labeled nucleic acids isolated from the FF cells and a substrate of expressed sequence tags (EST). The ESTs care used in the methods for monitoring differential expression of genes in a first filamentous fungal (FF) cell relative to expression of genes in a first filamentous fungal (FF) cell relative to expression of the cell same genes in one or more second filamentous fungal cells. Monitoring the global expression of genes from FF cells allows the production of the global expression of genes from FF cells allows the production discovered, possible functions of unknown open reading frames can be centified and gene copy number variation and stability can be discovered. The expression of genes can be used to study how FF cells and to changes in culture conditions, environmental stress, spore centified and gene copy number variation and stability can be complhogenesis, recombination, metabolic or catabolic pathway centified constitute conditions, environmental stress, spore centified constitutes are conditions, environmental stress, spore conditions constitutes are conditions of the gene products on an array equals one gene or open reading frame, and organisation of the carray equals one gene or open reading frame, and organisation of the carray equals one gene or open reading frame, and organisation of the carray equals of the results. AAF0478 to AAF11247 represents ESTs from Aspergillus organisation and affect and presents ests from Aspergillus organisation of the carray equals of the affect to AAF11853 represents ESTs from Aspergillus organisation con an affect fically claimed in the present in the present con appear and constitute of the carray equals on the present est est from a condition of the carray equals organisation of the carray equals of the carray equals 
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                                                                                                                                             Sequence 568 BP; 155 A; 116 C; 141 G;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    substrate of expressed sequence tags
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Monitoring differential expression of genes in filamentous uses fluorescence-labeled nucleic acids isolated from the c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Claim
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                                                                                                                                                                                    specifically claimed in the present invention.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          87; Page 1791-1792; 3161pp; English.
2 CGAAGUCGAGGCUUUCAGCAUG
                                                                   16;
                                                                                          Similarity
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                                                                   Conservative
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                                                                                   88.7%;
72.7%;
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                                                                                   Score 20.4;
Pred. No. 1
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                                                               Mismatches
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               (HEHL/)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Detecting Aspergillus nucleic acid in body samples by two-step polymerase chain reaction, for diagnosing aspergillosis
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                                                                                                                                                                               Deuteromycetes polynucleotide SEQ
                                                                                                                                                                                                                                   ABA01152;
                                                                                                                              Deuteromycetes sp
                                                                                                                                                                                                           24-JAN-2002
                        27-DEC-1999;
                                                  26-DEC-2000;
                                                                            11-SEP-2001.
                                                                                                      JP2001245657-A.
                                                                                                                                                        Aldonic acid;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       invention describes a novel method for detecting Aspergillus nucleic
                                                                                                                                                                                                                                                                                                                            153 CGAAGTCGAGGTTTTTAGCATG 132
                                                                                                                                                                                                                                                                                                                                                                                                                                                         genera). Thi
atus 185 RNA.
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 TAKEHARA KAGAKU KOGYO
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                                                   2000JP-0394766
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                           99JP-0369714.
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68.2%;
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Note: monitoring.

sequence data

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RESULT 8
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Best Local
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          The present invention relates to a new microbe of Acinetobacter or Burkholderis genus producing aldonic acid and oxidising specifically the hemiacetal hydroxy group of a saccharide having said hydroxy group. Aldonic acid is used as a mineral reinforcing agent. The present sequence was used to its used as a mineral reinforcing agent.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Sequence 1745 BP; 448 A; 382 C; 465 G; 450 T; 0 other;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           A new microbe for producing aldonic Acinetobacter or Burkholderis -
                                    The invention relates to evaluating strain variation within and between different populations of the tuberculosis bacterial pathogen, Mycobacterium tuberculosis or related Mycobacterium by determining the nucleotide sequence of the first strain at positions in the complete sequence of the genome that correspond to positions that differ in the nucleotide sequences of M. tuberculosis strains CDC 1551 (AAI99683) and H37Rv (AAI99682). The method is useful for evaluating strain variation of M. tuberculosis and has valuable application in the fields of
                                                                                                                                                                                                                                                                                                                                                                                                                                                         Mycobacterium
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                                                                                                                                                                   Claim 4; SEQ ID NO 2;
                                                                                                                                                                                             Evaluating strain variation of Mycobacterium tuberculosis, comprises determining the nucleotide sequence of the strain at positions in the genome corresponding to positions where M. tuberculosis strains CDC 1551 and H37Rv differ -
                                                                                                                                                                                                                                                                WPI; 2001-647261/74.
                                                                                                                                                                                                                                                                                             Fleischmann RD,
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variation; epidemiology;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                             tuberculosis
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63.6%;
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                                                                                                                                                                                  The invention relates to evaluating strain variation within and between different populations of the tuberculosis bacterial pathogen, Mycobacterium tuberculosis or related Mycobacterium by determining the nucleotide sequence of the first strain at positions in the complete sequence of the genome that correspond to positions that differ in the nucleotide sequences of M. tuberculosis strains CDC 1551 (AAI99683) and H37RV (AAI99682). The method is useful for evaluating strain variation of tuberculosis and has valuable application in the fields of tuberculosis genetics, epidemiology, patient treatment and epidemic
                                                                                                      Sequence 4411529 BP; 758565 A; 1449983 C; 1444602 G;
                                                                                                                                                                                                                                                                                                                            Claim
                                                                                                                                                                                                                                                                                                                                                 Evaluating strain variation of Mycobacterium tuberculosis, comprises determining the nucleotide sequence of the strain at positions in the genome corresponding to positions where M. tuberculosis strains CDC 1551 and H37Rv differ
                                                                                                                                                                             monitoring.
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                                                                                                                                                   specification,
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     specification, but was obtained in electronic format directly from USPTO
at seqdata.uspto.gov/sequence.html?DocID-6294328B1.
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                                                                                                                                  seqdata.uspto.gov/sequence.html?DocID=6294328B1.
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2 CGAAGUCGAGGCUUUCAGCAUG
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                                                                                                                                            sequence data for this patent did not form part of the printed tion, but was obtained in electronic format directly from USPTO
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63.6%;
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                                                  Score 17.2; DB 22;
Pred. No. 1.6e+02;
                                                                                                                                                                                                                                                                                                                                                                                                                                              Fraser CM,
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                                                                             Length 4411529;
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                                                                                                      758379 T; 0 other;
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201

AAGTAGAGGCTTTCTGCATG AAGUCGAGGCUUUCAGCAUG

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4

Matches Query Match Best Local

l Similarity 13; Conserv

Conservative

5.

Mismatches

23

73.0%;

Score 16.8; Pred. No. 97;

Length

454; 0;

Gaps

0

Sequence 454 BP; 135 A; 84 C; 120

<u>ن</u>

115 T; 0 other; BB 22; 2

15

ftp.wipo.int/pub/published_pct_sequences.

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RESULT 10
ABA44550/c
                                In the invention relates to a spatially-addressable set of single exon nucleic acid probes for measuring gene expression in a sample derived from human breast and By 474 cells. The method involves contacting the probes with a collection of detectably labelled nucleic acids derived from mRNA of human breast, and then measuring the label cound to each probe of the microarray. The probes are useful for cerifying the expression of regions of genomic DNA predicted to encode proteins. They are useful for gene discovery, and for expression analysis is useful for gene discovery, and for expression analysis is useful for assessing the toxicity of chemical agents on cells. The microarray of this invention presents a far greater than expressed sequence tag microarrays. The method is suitable for rapid production of functional information from genomic sequence. The present sequence is a single exon nucleic acid probe of the invention. Note: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format directly
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               04-FEB-2000; 2000US-0180312; 26-MAY-2000; 2000US-0207456; 30-UNA-2000; 2000US-0608408; 03-AUG-2000; 2000US-06323665; 21-SEP-2000; 2000US-0234687; 27-SEP-2000; 2000US-0236359;
                                                                                                                                                                                                                                                                                                                                                                 New spatially-addressable set of single exon nucleic acid probes, useful for measuring gene expression in sample derived from human breast, comprises number of single exon nucleic acid probes
                                                                                                                                                                                                                                                                                                                                         Claim
                                                                                                                                                                                                                                                                                                                                                                                                                                       WPI; 2001-496933/54.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Penn
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   disease;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Human; microarray; single exon probe; gene expression; breast;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Human breast cell single exon nucleic acid probe #3245
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                01-FEB-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ABA44550;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                       SG,
                                                                                                                                                                                                                                                                                                                                         ۲.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    MOLECULAR DYNAMICS
                                                                                                                                                                                                                                                                                                                                      SEQ ID NO 3245;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   cancer;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Hanzel DK,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              (first entry)
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Chen W,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               454
                                                                                                                                                                                                                                                                                                                                  327pp + sequence listing; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ВÞ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Rank DR;
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RESULT 12
ABA24760/c
ID ABA247
XX ABA247
AC ABA247
XX 23-JAN
DT 23-JAN
XX EW Cardio
KW Cardio
KW Congen
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ABA54997/c
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                                                                                                                                                                                                                                        Query Match
Best Local S
Matches 13
                                                                                                                                                                                                                                                                                                                                                      The invention relates to a single exon nucleic acid probe for measuring human gene expression in a sample derived from human foetal liver. The single exon nucleic acid probes may be used for predicting, measuring and displaying gene expression in samples derived from human fetal liver. The present sequence is a single exon nucleic acid probe of the invention.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ABA54997 standard; DNA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         WPI;
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26-MAY-2000;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ABA54997;
                                                                                                                                                                                                                                                                                         Sequence 454 BP; 135 A; 84 C; 120 G; 115 T; 0 other;
                                                                                                                                                                                                                                                                                                                                           Note:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Human genome-derived single exon nucleic acid probes useful analyzing gene expression in human fetal liver -
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            09-AUG-2001
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                                                                                                                                                                                                                                                                                                                                                                                                                                              Claim
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         03-AUG-2000;
21-SEP-2000;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  30-JUN-2000;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Human foetal liver single exon nucleic acid probe #3302
congenital
           Human; gene expression; heart; microarray; vascular system; probe; cardiovascular disease; hypertension; cardiac arrhythmia;
                                                  Probe
                                                                           23-JAN-2002
                                                                                                    ABA24760;
                                                                                                                                                                                                                                                                                                                               Note: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format dir
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        (MOLE-)
                                                                                                                           ABA24760
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                                                #3226 for gene expression analysis in human heart cell sample
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        MOLECULAR DYNAMICS INC
                                                                                                                                                                                                                                                      Similarity
                                                                                                                                                                                        AAGUCGAGGCUUUCAGCAUG 23
|||: |||||:::| |||:|
AAGTAGAGGCTTTCTGCATG 182
                                                                                                                             standard;
                                                                                                                                                                                                                                                                                                                                                                                                                                             SEQ ID NO 3302; 639pp + sequence listing;
                                                                                                                                                                                                                                                                                                                   at ftp.wipo.int/pub/published_pct_sequences.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Hanzel DK,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               2000US-0632366.
2000US-0234687.
2000US-0236359.
2000GB-0024263.
                                                                                                                                                                                                                                           Conservative
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2000US-0207456.
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                                                                           (first entry)
                                                                                                                             DNA;
                                                                                                                                                                                                                                                   73.0%;
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                                                                                                                                                                                                                                          Score 16.8; D
Pred. No. 97;
5; Mismatches
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                                                                                                                                                                                                                                                                   BB
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                                                                                                                                                                                                                                                                 Length 454;
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PF PN N XXX
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AAK03266/c
ID AAK03266 standard;
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                                                                                                                                                                                                                                                                                                                                Matches
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Best Local
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26-MAY-2000;
30-JUN-2000;
                                                                                                                                                                                                                                                                                                                                                                                                              measuring human gene expression in a sample derived from human heart. The present sequence is one such probe. The probes may be used for predicting, measuring and displaying gene expression in samples derived from the human heart via microarrays. By measuring gene expression, the probes are useful for predicting, diagnosing, grading, staging, monitoring and prognosing diseases of the human heart and vascular system e.g. cardiovascular disease, hypertension, cardiac arrhythmias and congenital heart disease.

Note: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format directly from WIPO
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Penn
                                                                                             epilepsy; cancer;
                                                                                                         Human; brain expressed exon; gene expression analysis; probe; microarray; Alzheimer's disease; multiple sclerosis; schizophrenia;
                                                                                                                                                                                                                                                                                                                                                                            Sequence 454 BP; 135 A; 84 C; 120 G; 115 T; 0 other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Claim 1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Single exon nucleic acid probes for analyzing gene expression in human hearts -
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      WPI;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         27-SEP-2000;
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                                                                                                                                             Human brain expressed single exon
                                                                                                                                                                       05-NOV-2001
                                                                                                                                                                                             AAK03266;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    The present invention relates to single exon nucleic acid probes for
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    (MOLE-)
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                                                WO200157275-A2
                                                                      Homo sapiens.
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                                                                                                                                                                                                                                                                                                                                                                                                    ftp.wipo.int/pub/published_pct_sequences
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                                                                                                                                                                                                                                                                                AAGTAGAGGCTTTCTGCATG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           SEQ ID No 3226; 530pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Hanzel DK,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          2000US-0180312.
2000US-0207456.
2000US-0608408.
                                                                                                                                                                                                                                                                                                                                Conservative
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2000GB-0024263
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   2000US-0632366
2000US-0234687
                                                                                                                                                                     (first entry)
                                                                                              SS.
                                                                                                                                                                                                                    DNA;
                                                                                                                                                                                                                                                                                                                                         73.0%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Chen
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                                                                                                                                                                                                                     ₿P.
                                                                                                                                                                                                                                                                                                                                5; Mismatches
                                                                                                                                                                                                                                                                                                                                          Score 16.8;
Pred. No. 9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Rank DR;
                                                                                                                                               probe SEQ ID NO:
                                                                                                                                                                                                                                                                                                                                              97
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                                                                                                                                                3257
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30-JAN-2001; 2001WO-US00667

09-AUG-2001

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RESULT 14
AAKZ8719/c
ID AAKZ8719;
XX
AC AAKZ8719;
XX
DT 06-NOV-2001 (first entry)
XX
DE Human bone marrow expressed singl
XX
Human; bone marrow expressed exon
XX
Human; bone marrow expressed exon
XX
HOZO0157276-A2.
XX
PN WO200157276-A2.
XX
PN
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Best Local Similarity
Matches 13; Conserv
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26-MAY-2000;
30-JUN-2000;
30-AUG-2000;
21-SEP-2000;
27-SEP-2000;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Human; bone marrow expressed exon;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Sequence 454 BP; 135
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            probes which are derived from genomic sequences expressed in the human brain. They can be used to measure gene expression in brain cell samples, which may enable the diagnosis and improved treatment of nervous system diseases such as Alzheimer's disease, multiple sclerosis, schizophrenia, epilepsy and cancers. The present sequence is one of the probes of the
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Penn
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Single exon nucleic acid brains -
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  probes which are derived from genomic semicanon nucleic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Example 4;
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|||:||:||:::| |||:|
AAGTAGAGGCTTTCTGCATG 182
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Hanzel DK,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                SEQ ID NO:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        2000US-0180312.
2000US-0207456.
2000US-0608408.
2000US-0632366.
2000US-0234687.
2000US-0236359.
2000US-0236359.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              expressed single exon
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         73.0%;
65.0%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  A; 84 C; 120 G; 115 T; 0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 3257; 650pp + Sequence Listing; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Chen
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Pred. No. 97
                                                  Rank DR;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          con; gene expression analysis; probe,
lymphoma; myeloma; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Mismatches
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AAI13296/c
ID AAI132
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Query Match
Best Local S
Matches 13
                                                                                                                                                                                  30-JUN-2000;
03-AUG-2000;
21-SEP-2000;
27-SEP-2000;
                                                                                                                                          Penn
                                                                                                                                                         (MOLE-)
                                                                                                                                                                                                                 04-FEB-2000; 2000US-0180312.
26-MAY-2000; 2000US-0207456.
                                                                                                                                                                                                                                           30-JAN-2001;
                                                                                                                                                                                                                                                            09-AUG-2001.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         probes which are derived from genomic sequences expressed in the human bone marrow. They can be used to measure gene expression in bone marrow samples, which may enable the improved diagnosis and treatment of cances such as lymphoma, leukaemia and myeloma.
                                                                                                                                                                                                                                                                             WO200157278-A2
                                                                                                                                                                                                                                                                                                             cervical cancer;
                                                                                                                                                                                                                                                                                                                                      Probe #3229
                                                                                                                                                                                                                                                                                                                       Probe;
                                                                                                                                                                                                                                                                                                                                                                       AAI13296;
                                                                                                                                                                                                                                                                                                                                                                                      AAI13296 standard; DNA; 454
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           analyzing gene expression in human bone marrow
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Example 4;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Human genome-derived single exon nucleic acid probes useful
                                                                                                                        2001-488901/53.
                                                                                                                                         SG,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   probes
                                                                                                                                                                                                                                                                                                                                                                                                                               201 AAGTAGAGGCTTTCTGCATG 182
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  13;
                                                                                                                                                                                                                                                                                                                   human; microarray; gene expression;
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                                                                                                                                                        MOLECULAR DYNAMICS INC.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                454 BP; 135 A; 84 C; 120
                                                                                                                                        Hanzel DK,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                of the invention.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        SEQ ID NO: 3276; 658pp + Sequence Listing;
                                                                                                                                                                        2000US-0608408.
2000US-0632366.
2000US-0234687.
2000US-0236359.
2000US-0024263.
                                                                                                                                                                                                                                                                                                                                     for
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Conservative
                                                                                                                                                                                                                                            2001WO-US00670
                                                                                                                                                                                                                                                                                                                                                     (first entry)
                                                                                                                                                                                                                                                                                                                                     gene
                                                                                                                                                                                                                                                                                                             88
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     leukaemia and myeloma. The present sequence is one
                                                                                                                                                                                                                                                                                                                                expression analysis in human cervical cell sample.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       73.0%;
                                                                                                                                        Chen
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Pred. No. 9
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                                                                                                                                        Rank
                                                                                                                                                                                                                                                                                                                                                                                                                                               23
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The present invention relates to human single exon nucleic acid probes (SENP). The present sequence is one such probe. The SENPs are derived from human HeLa cells. The SENPs can be used to produce a single exon microarray, which can be used for measuring human gene expression in a sample derived from human cervical epithelial cells. By measuring gene expression, the probes are therefore useful in grading and/or staging of diseases of the cervix, notably cervical cancer. Mote: The sequence data for this patent did not form part of the printe specification, but was obtained in electronic format directly from WIPO

the printed y from WIPO

Claim

25;

SEQ ID No 3229; 487pp; English.

Human

genome-derived single exon nucleic acid probes useful for ling gene expression in human cervical epithelial cells -

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CC at ftp.Mipo.int/published_Dot_sequences.
XX

Sequence 454 BP; 335 A; 84 C; 120 G; 115 T; 0 other;

Query Match
Best Local Similarity 65.0%; Pred No. 97;
Best Local Similarity 65.0%; Pred No. 97;
Matches 13; Conservative 5; Mismatches 2; Indels 0; Gaps 0;

QY

4 ANGUCANGCCUTUCACAUG 23

Db 201 ANGTONOGCUTUTCACAUG 182

Search completed; June 12, 2003, 01:45:17

Job time: 135.802 secs
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; TYPE: NUCLEIC
; STRANDEDNESS:
; TOPOLOGY: lin
US-07-720-587A-1
                                                                                                                                                        COMPUTER READABLE FORM:

COMPUTER READABLE FORM:

MEDIUM TYPE: 3.5" Diskette, 1.44 Mb storage

COMPUTER: IBM PS/2 Model 502 or 555X

OPERATING SYSTEM: IBM P.C. DOS (Version 3.30)

SOFTWARE: Wordberfect (Version 5.0)

CURRENT APPLICATION DATA:

APPLICATION NUMBER: US/07/720,587A

FILING DATE: 1991628

CLASSIFICATION DATA: Including application

PRIOR APPLICATION DATA: described below:

APPLICATION NUMBER: 3237

APPLICATION NUMBER: 3237

NAME: Wardurg, Richard J.

REGISTRATION NUMBER: 3237
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 RESULT 1
US-07-720-587A-1
   Query Match
Best Local S
Matches 17
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                                                                                                                                                                                                                                                                                                                                                                                                                                                         Sequence 1, Application US/07720587A Patent No. 5352579
GENERAL INFORMATION:
APPLICANT: Curt L. Milliman
                                                                                             TELEFAX: (213) 955-0440
TELEX: 67-3510
INFORMATION FOR SEQ ID NO: 1
SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TELEPHONE: (213) 489-1600
                                                                                                                                                                                                                                                                                                                                                                                                                          APPLICANT: Curt L. Milliman
TITLE OF INVENTION: NUCLEIC ACIDS PROBES
TITLE OF INVENTION: TO HISTOPLASMA CAPSULATUM
NUMBER OF SEQUENCES: 3
                                                                                                                                                                                                                                                                                                                                                                                                                CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                         STATE: California
                                                                                                                                                                                                                                                                                                                                                                                 CITY: Los Angeles
                                                                                     LENGTH:
                                                                                                                                                                                                                                                                                                                                                                                            STREET:
                                                                                                                                                                                                                                                                                                                                                                                                        ADDRESSEE:
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   l Similarity
17; Conserv
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611 West Sixth Street
   Conservative
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688.7
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67.0
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            95.78;
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3 US-09-166-750-18
3 US-09-16-093-18
3 US-09-172-019-18
3 US-09-172-019-18
1 US-09-168-094-18
1 US-09-103-8A0A-2
1 US-08-148-910-14
4 US-09-103-8A0A-2
1 US-08-448-937A-14
4 US-09-65-073-1
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1 US-08-920-818-13
1 US-08-920-818-13
1 US-08-920-818-13
   5
          Score 22; [
Pred. No. 0.
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   Mismatches
          DB 1;
  0;
                   Length 22;
  Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Sequence 18, Appl
Sequence 11, Appl
Sequence 11, Appl
Sequence 11, Appl
Sequence 12, Appl
Sequence 14, Appl
Sequence 14, Appl
Sequence 14, Appl
Sequence 13, Appl
Sequence 1065, Appl
Sequence 1065, Appl
Sequence 1065, Appl
Sequence 281, Appl
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Sequence
 0
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 Gaps
0
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Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries

Minimum DB Maximum DB Total number of

seq

length: 0 length: 2000000000

hits satisfying chosen parameters:

882724

441362 seqs, 153338381 residues

Scoring table: Sequence: Title: Perfect score:

Gapop 10.0 , Gapext 1.0

US-09-674-195C-20 23

1 rcgaagucgaggcuuucagcaug

23

nucleic -

nucleic search, using sw model

GenCore version 5.1.6 Copyright (c) 1993 - 2003 Compugen

June 12, 2003, 01:18:34; Search time 22.066 Seconds (without alignments) 319.658 Million cell updates/sec

Database

Issued_Patents_NA:*

1: /cgn2_6/ptodata/1,

2: /cgn2_6/ptodata/1,

3: /cgn2_6/ptodata/1,

4: /cgn2_6/ptodata/1,

5: /cgn2_6/ptodata/1,

6: /cgn2_6/ptodata/1,

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/cgn2_6/ptodata/1/ina/BCTUS_COMB.seq:*
/cgn2_6/ptodata/1/ina/backfiles1.seq:*

Result

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

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Score

Match Length DB

Description

Sequence 1, Sequence Sequence

95.7 74.8 74.8

4403765

Query

US-07-720-587A-1
4 US-09-103-840A-2
4 US-09-103-840A-1
1 US-08-055-945-1
1 US-08-055-945-1
2 US-08-926-789-13
2 US-08-926-789-13
2 US-09-166-750-22
2 US-09-166-094-22
2 US-09-172-019-22
2 US-09-166-750-12
2 US-09-166-750-12
2 US-09-166-93-12
2 US-09-166-94-12
2 US-09-166-93-12
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3 US-09-166-94-12
3 US-09-166-94-12
3 US-09-166-94-12
3 US-09-166-94-13
3 US-08-313-445A-3
3 US-08-313-445A-3
3 US-08-515-903A-3
3 US-08-515-903A-3
3 US-08-515-903A-7
2 US-08-515-903A-7
3 US-08-515-903A-7
3 US-08-515-903A-7

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1, Appli e 2, Appli 1, Appli 1, Appli 1, Appli 1, Appli 1, Appli 22, Appli 22, Appli 22, Appli 22, Appli 12, Appli 13, Appli 1

120-592A-3

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70.4 70.4

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CGAAGUCGAGGCUUUCAGCAUG 23

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RESULT 2
US-09-103-840A-2
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RESULT 4
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                                                                                                                                                                                                                                                                               SOFTWARE: PatentIn Ver. 2.1 SEQ ID NO 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Sequence 1, Application US/09103840A Patent No. 6294328
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Best Local :
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                                                                                                                                       Query Match
Best Local :
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                                                                                                                                                                                                                                                                                                             APPLICANT: WHITE, Owen R.
APPLICANT: FRASER, Claire M.
APPLICANT: VENTER, John C.
TITLE OF INVENTION: DNA SEQUENCES FOR STRAIN ANALYSIS IN MYCOBACTERIUM FITLE OF INVENTION: TUBERCULOSIS
FILE REFERENCE: 24366-20007.00
CURRENT APPLICATION NUMBER: US/09/103,840A
CURRENT FILING DATE: 1998-06-24
NUMBER OF SEQ ID NOS: 2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CURRENT FILING DATE: 1998-06-24 NUMBER OF SEQ ID NOS: 2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         FILE REFERENCE: 24366-20007.00
CURRENT APPLICATION NUMBER: US/09/103,840A
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TITLE OF INVENTION: DNA SEQUENCES FOR STRAIN ANALYSIS IN MYCOBACTERIUM TITLE OF INVENTION: TUBERCULOSIS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                APPLICANT: FLEISCHMAN, Robert D.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     SOFTWARE: PatentIn Ver. 2.1
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                         APPLICANT: FLEISCHMAN, Robert D.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         OTHER INFORMATION: CDC 1551
OTHER INFORMATION: "n" bases at various
OTHER INFORMATION: represent a, t, c or
                                                                                                                                                                                                             ORGANISM: Mycobacterium tuberculosis OTHER INFORMATION: H37RV
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ORGANISM: Mycobacterium tuberculosis
                                                                                                                                                                                                                                                  TYPE: DNA
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                                                                                                                                                                                                                                                                 ENGTH: 4411529
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171881 CGCTGTCGAGGCTTTCACCATG 171902
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                                                                                                                       Conservative
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63.6%;
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                                                                                                                                       Score 17.2;
Pred. No. 28;
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Pred. No. 28;
                                                                                                                       Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Mismatches
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                                                                                                                                                        Length 4411529;
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                                                                                                                       Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Indels
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                                                                                                                                                                                                                   US-08-224-591-13/c
                                                                                                                                                                                                                                                                                                                                                        Query Match 70.7
Best Local Similarity 60.9
Matches 14; Conservative
                                                                                                                                                                                    Sequence 13,
Patent No. 5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Patent No.
                                                                                                                                                                     GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TELEX: 423092 NYP UI
INFORMATION FOR SEQ ID NO:
SEQUENCE CHARACTERISTICS:
LENGTH: 1722 bp
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             APPLICATION NUMBER: US/07/692,745
FILLING DATE: NO. 54628556
ATTORNEY/AGENT INFORMATION:
NAME: Kurt G. Briscoe
REGISTRATION NUMBER: 33,141
REFERENCE/DOCKET NUMBER: Bayer 819
                                                                        APPLICANT: Whitlow, Marc
APPLICANT: Filpula, David
TITLE OF INVENTION: Linker For Linked Fusion Polypeptides
NUMBER OF SEQUENCES: 25
CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TELECOMMUNICATION INFORMATION:
TELEPHONE: (212) 391-0520
TELEFAX: (212) 382-0949
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CLASSIFICATION: 435
PRIOR APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            SOFTWARE: WORDPERFECT 5.0 CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  COMPUTER READABLE FORM:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TITLE OF INVENTION:
                                                                                                                                                                                                                                                                                                                                                                                                                                            MOLECULE TYPE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CORRESPONDENCE ADDRESS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TITLE OF INVENTION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             MEDIUM TYPE: Diskette, 5.25 inch, 1.2 MB MEDIUM TYPE: Storage COMPUTER: NEC POWERMATE 1 Plus OPERATING SYSTEM: DOS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    COUNTRY: U
ZIP: 10036
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    STATE: New York
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ADDRESSEE: SEAL AVEnue
                                                                                                                                                                                                                                                                                                                                                                                                                                                         STRANDEDNESS:
TOPOLOGY: Lin
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TYPE: Nucleotide
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                FILING DATE:
                     STATE:
                                                 STREET:
 COUNTRY:
                                                                   ADDRESSEE:
                                                                                                                                                                                                                                                                                      397 GCGATGTCGAGGCTATCTGCGTG 419
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                                                                                                                                                                                     3, Application US/08224591
5856456
                               Washington
                                                                                                                                                                                                                                                                                                                        RCGAAGUCGAGGCUUUCAGCAUG 23
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Application US/08055945
               D.C.
                                               1100 New York Avenue,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Springer, Wolfgang; Rast, Hans George;
L bberding, Antonius; and Kanne, Reinhard
VERNTION: A METHOD FOR THE DETECTION AND
VERNTION: QUARTITATIVE DETERMINATION OF
VERNTION: NITROSOMONAS STRAINS IN
U.S.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    U.S.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                            Linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       SPRUNG HORN KRAMER & WOODS
40 Avenue of the Americas
                                                                    Sterne, Kessler,
                                                                                                                                                                                                                                                                                                                                                                                                                                            Genomic DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Double
                                                                                                                                                                                                                                                                                                                                                                      70.4%;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               US/08/055,945
                                                                                                                                                                                                                                                                                                                                                        ; Score 16.2; D; Pred. No. 35; 5; Mismatches
                                                   Goldstein &
e, Suite 600
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RESULT 6
US-08-392-338A-22/c
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Query Match
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CLASSIFICATION: 530
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/002,845
FILING DATE: 15-JAN-1993
APPLICATION NUMBER: US 07/980,529
THING DATE: 20-NOV-1992
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TELEFAX: (202) 371-254
INFORMATION FOR SEQ ID NO:
                                                                                                                                                                                                                                                                                                                                                                                                                GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       FEATURE:
NAME/KEY:
      PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 07/989,846
FILING DATE: 20-NOY-1992
                                                                                              COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
                                                                                                                                                               COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
                                                                                                                                                                                                                                                                                      CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             REGISTRATION NUMBER: 29,021
REFERENCE/DOCKET NUMBER: 0977.1920002/JAG
TELECOMMUNICATION INFORMATION:
                                                                                                                                                                                                                                                                                                                      APPLICANT:
TITLE OF I
                                                                                                                                                                                                                                                                                                      NUMBER OF SEQUENCES:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    SEQUENCE CHARACTERISTICS:
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                                                                                                                                                                                                                                                                                                                                                     PPLICANT:
                                                                                                                                                                                                                                                                                                                                                                   PPLICANT:
                                                                                                                                                                                                                                   STREET: 1100 New CITY: Washington
                                                         CLASSIFICATION:
                                                                  APPLICATION NUMBER: US/08/392,338A FILING DATE: 22-FEB-1995
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TYPE: nucleic acid
                                                                                                                                                                                                               COUNTRY:
                                                                                                                                                                                                                                                                         ADDRESSEE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TOPOLOGY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             LOCATION:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              COMPUTER: IBM PC compatible OPERATING SYSTEM: PC-DOS/MS-DOS
APPLICATION DATA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 350 GAAGTAGAGCCTTTCAGCA 332
                                                                                                                                                                                     20005
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 13;
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                                                                                                                                                                                                                            D.C.
                                                                                                                                                                                                                                                                                                           ?: Filpula, David
INVENTION: Multivalent Antigen-Binding Proteins
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TYPE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Goldstein, Jorge A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         READABLE FORM:
                                                                                                                                                                                                                                                                                                                                                                                                                                          Application US/08392338A
                                                                                                                                                                                                                                                       B: Sterne, Kessler, Goldstein & Fox P.L.L.C.
1100 New York Avenue, NW
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  738 base pairs
                                                                                                                                                                                                                                                                                                                                                                             Wood, James F.
                                                                                                                                                                                                                                                                                                                                                                Hardman,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Conservative
                                                                                                                                                                                                                                                                                                                                                  Bird, Robert
                                                                                                                                                                                                                                                                                                                                                                                               Whitlow, Marc
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68.4%;
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Pred. No. 4
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US-08-926-789-13/c
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US-08-392-338A-22
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Sequence 13,
Patent No. 5
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Best Local Similarity
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                                 INFORMATION FOR SEQ ID NO:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TELEFAX: (202) 371-2540 INFORMATION FOR SEQ ID NO: SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                     APPLICATION NUMBER: 15-JAN-
FILING DATE: 15-JAN-
PRIOR APPLICATION DATA:
SEQUENCE CHARACTERISTICS:
LENGTH: 738 base pairs
                                                                          NAME: GOLDStein, Jorge A.
REGISTRATION NUMBER: 29,021
REFERENCE/DOCKET NUMBER: 09
TELECOMMUNICATION INFORMATION:
                                                                                                                                     AFFILICATION NUMBER: US 07/980,529
FILING DATE: 20-NOV-1992
ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                   COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOTWARE: Patentin Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                 COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy
                                                                                                                                                                                                                                                       PRIOR APPLICATION DATA:
APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            REFERENCE/DOCKET NUMBER: 09
TELECOMMUNICATION INFORMATION:
TELEPHONE: (202) 371-2600
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      APPLICANT: Whitlow, Marc
APPLICANT: Filpula, David
TITLE OF INVENTION: Linker For Linked Fusion Polypeptides
NUMBER OF SEQUENCES: 25
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CORRESPONDENCE ADDRESS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      FEATURE:
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                                                            TELEPHONE:
                                                                                                                                                                                                                                          FILING DATE:
                                                                                                                                                                                                                                                                                         CLASSIFICATION:
                                                                                                                                                                                                                                                                                                          FILING DATE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             CITY: Washington
                                                                                                                                                                                                                                                                                                                    APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                    COUNTRY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ADDRESSEE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TYPE: nucleic acid
STRANDEDNESS: both
TOPOLOGY: both
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TOPOLOGY:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  3 GAAGUCGAGGCUUUCAGCA 21
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1100 New York Avenue,
                                               (202)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                738 base pairs
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                                                              (202)
                                                                                                                                                                                                        15-JAN-1993
                                                                                                                                                                                                                                                                                                                                                                                                 Floppy disk
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                                           371-2540
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ork Avenue, Suite 600
                                                                                                                                                                                                                                                                                                                  us/08/926,789
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                                                                                       0977.1920002/JAG
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Pred. No. 4
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                                                                                        INFORMATION FOR SEQ ID NO: SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   tent No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                NUMBER OF SEQUENCES: 2
CORRESPONDENCE ADDRESS:
                                                                                                                                  NAME: Goldstein, Jorge A.
REGISTRATION NUMBER: 29,021
REFERENCE/DOCKET NUMBER: 09
TELECOMMUNICATION INFORMATION:
TELEPHONE: (202) 371-2600
                                                                                                                                                                                                                             APPLICATION NUMBER: US 07/989,846
FILING DATE: 20-NOV-1992
PRIOR APPLICATION DATA:
APPLICATION UNBER: US 07/796,936
FILING DATE: 25-NOV-1991
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        APPLICANT:
                                                                                                                                                                                                                                                                                                                                                    PRIOR APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                  CURRENT APPLICATION DATA:
                                                                                                                                                                                                               FILING DATE: 25-NOV-1991
ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                          PRIOR APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TITLE OF INVENTION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 LOCATION:
                                                                                                                                                                                                                                                                                                                                                                     APPLICATION NUMBER: FILING DATE: HerewicLASSIFICATION:
                                                                                                                                                                                                                                                                                                                                                                                                                               COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Version
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Match 68.7%;
Local Similarity 68.4%;
es 13; Conservative
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TOPOLOGY: both
                                                                                                                                                                                                                                                                                                                         APPLICATION NUMBER: US 0: FILING DATE: 22-FEB-1995
                            TOPOLOGY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ADDRESSEE:
 NAME/KEY:
                                              STRANDEDNESS:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Washington
                                            nucleic acid
EDNESS: both
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1100 New York Avenue, NW
                                                                           738 base pairs
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Rollence, Michelle
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                                                                                                                        (202)
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CDS
                              both
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                                                                                                                        371-2540
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Pred. No. 49;
4; Mismatches
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                                                                                                             ; NAME/KEY:
; LOCATION:
US-09-166-093-22
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Best Local S
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               APPLICANT: Rollence, Michelle
TITLE OF INVENTION: Multivalent Antigen-Binding Proteins
NUMBER OF SEQUENCES: 23
CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                    REFERENCE/DOCKET NUMBER: 09
TELECOMMUNICATION INFORMATION:
TELEPHONE: (202) 371-2600
                                                                                                                                                                                                                                                                                                                                                                                   APPLICATION NUMBER: US 07/989,846
FILING DATE: 20-NOV-1992
PRIOR APPLICATION DATA:
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APPLICATION NUMBER: US 08/392,338
FILING DATE: 22-FEB-1995
PRIOR APPLICATION DATA:
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                                                                                                                                                        FEATURE:
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COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             STREET: 1100 New CITY: Washington STATE: D.C.
                                                                                                                                                                    TOPOLOGY:
                                                                                                                                                                                                                                                                                                                  REGISTRATION NUMBER:
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                                                                                                                                                                                     STRANDEDNESS:
                                                                                                                                                                                                                                                                                                                                                            APPLICATION NUMBER: UFILING DATE: 25-NOV-1
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350 GAAGTAGAGCCTTTCAGCA 332
350 GAAGTAGAGCCTTTCAGCA 332
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    738 base pairs
nucleic acid
DEDNESS: both

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                                                     Conservative
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Pred. No. 49;
4; Mismatches
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                                                       Score 15.8; [Pred. No. 49; 4; Mismatches
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APPLICANT:

Bird, Robert

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RESULT 11
US-09-166-094-22/c
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                                                              Sequence 22
Patent No.
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PRIOR APPLICATION NUMBER: US 07
PRIOR DATE: 25-NOV-1991
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                                                                                                                                                                                                                                                                                                                                                                                               SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                 NAME: GOLDStein, Jorge A.
REGISTRATION NUMBER: 29,021
REFERENCE/DOCKET NUMBER: 09
TELECOMMUNICATION INFORMATION:
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PRIOR APPLICATION UNMBER: US 08/392,338
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CURRENT APPLICATION DATA:
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                                                                                                                                                                                                                                                                                                                                                TYPE: nucleic acid
STRANDEDNESS: both
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                                                22,
No. 6121424
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350 GAAGTAGAGCCTTTCAGCA 332
                                                   INFORMATION:
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Whitlow, Marc
Wood, James F.
Hardman, Karl
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1100 New York Avenue, NW
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Pred. No. 4
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PCT-US93-11138-13/c
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; LOCATION:
US-09-166-094-22
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GENERAL INFORMATION:
APPLICANT: Enzon, Inc.
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Best Local Similarity
Matches .13; Conserv
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INFORMATION FOR SEQ ID NO:
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
                                                                                                                                      CORRESPONDENCE ADDRESS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     APPLICATION NUMBER: US 07/796,936
FILING DATE: 25-NOV-1991
ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                     TITLE OF INVENTION:
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LENGTH: 738 base pairs
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PRIOR APPLICATION NUMBER: US 07/989,846
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TELECOMMUNICATION INFORMATION:
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APPLICATION NUMBER: US 08/392,338
                                                                                                                                                    NUMBER OF SEQUENCES:
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TITLE OF INVENTION: Multivalent Antigen-Binding Proteins
NUMBER OF SEQUENCES: 23
                                      COUNTRY: U.S.A. ZIP: 20005-3934
                                                                                                      STREET:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TYPE: nucleic acid
STRANDEDNESS: both
TOPOLOGY: both
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SOFTWARE: Patentin
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REGISTRATION NUMBER:
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                                                                                               E: Sterne, Kessler, Goldst
1100 New York Avenue, N.W.
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1100 New York Avenue, NW
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SYSTEM: PC-DOS/MS-DOS
Patentin Release #1.0, Version #1.25
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Pred. No. 4
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US-08-392-338A-12/c
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MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
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REGERENCE/DOCKET NUMBER: 0977.2006604/JAG
TELECOMMUNICATION INFORMATION:
TELEPHONE: (202) 371-2600
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APPLICATION NUMBER: 1
FILING DATE: 15-JAN-
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APPLICATION NUMBER: US 07/980,529
FILING DATE: 20-NOV-1992
                                                                                                                  SOFTWARE: PatentIn Rel CURRENT APPLICATION DATA:
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                          PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 07/989,846
FILING DATE: 20-NOV-1992
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                                                                                      APPLICATION NUMBER: US/0 FILING DATE: 22-FEB-1995
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13; Conserv
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                                                                                                                                                                                                                                                     Washington
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DEDNESS: both
                                                                                                                                                                                                              20005
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                                                                                                                                                                                                                                       D.C
                                                                                                                                                                                                                                                                                                                                                                                                                                                    Application US/08392338A
                                                                                                                                                                                                                U.S.A.
                                                                                                                                                                                                                                                                     E: Sterne, Kessler, Goldstein & Fox P.L.L.C
1100 New York Avenue, NW
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      738 base pairs
                                                                                                                                                                                                                                                                                                                                                           Hardman, Karl
Bird, Robert
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                                                                                                                                   PatentIn Release #1.0, Version #1.25
                                                                                                                                                                                                                                                                                                                                                                                                        Whitlow, Marc
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          both
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SYSTEM: PC-DOS/MS-DOS
NUMBER:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               371-2540
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                                                                                                    US/08/392,338A
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US 07/796,936
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Pred. No. 4
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US-08-392-338A-12
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Best Local Similarity
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APPLICATION NUMBER: US 07/796
FILING DATE: 25-NOV-1991
ATTORNEY_AGENT INFORMATION:
NAME: Goldstein, Jorge A.
REGISTRATION NUMBER: 29,021
REFERENCE_POCKET NUMBER: 097
TELECOMMUNICATION INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ent No.
                                                                                                           APPLICATION NUMBER: US 07/989,846
FILING DATE: 20-NOV-1992
PRIOR APPLICATION DATA:
                                                                                                                                                                           PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/392,338
FILING DATE: 22-FEB-1995
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                                                                                                                                                            PRIOR APPLICATION DATA:
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CURRENT APPLICATION DATA:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                               NUMBER OF SEQUENCES:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TITLE OF INVENTION: Methods
TITLE OF INVENTION: Proteins
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REFERENCE/DOCKET NUMBER:
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                                                                                                                                                                                                                                                        APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                     COMPUTER: IBM PC compatible OPERATING SYSTEM: PC-DOS/MS-DOS
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COMPUTER: I
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EDNESS: both
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1100 New York' Avenue,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      744 base pairs
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Rollence, Michelle
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                                                                                                                                                                                                                                                                                                                                   Floppy disk
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                                                                                                                                                                                                                                                                                        Release #1.0,
                                                                                               US 07/796,936
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                   0977.003000C
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Pred. No. 4
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TELEFAX: (202) 371-2540 INFORMATION FOR SEQ ID NO: 12:

SEQUENCE CHARACTERISTICS:

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Query Match
Best Local Similarity
Matches 13; Conserve
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US-09-166-093-12/c
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; LOCATION:
US-09-166-750-12
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Patent No.
                                                                                                                                                                                                CLASSIFICATION:

CLASSIFICATION:

PRIOR APPLICATION NUMBER: US 08/392,338

FILING DATE: 22-FEB-1995

PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 07/989,846

FILING DATE: 20-NOV-1992

PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 07/796,936

FILING DATE: 25-NOV-1991
                                                   TELEFAX: (202) 371-2540 INFORMATION FOR SEQ ID NO: 1 SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                GENERAL INFORMATION:
                                                                                             NAME: GOLdStein, Jorge A.
REGISTRATION NUMBER: 29,021
REFERENCE/DOCKET NUMBER: 0977.003000B
TELECOMMUNICATION INFORMATION:
TELEPHONE: (202) 371-2600
                                                                                                                                                                                                                                                                                                                                                                  SOFTWARE: Patentin Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/09/166,093
FILING DATE: Herewith
                                                                                                                                                                              FILING DATE: 25-NOV-1991
ATTORNEY/AGENT INFORMATION:
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MEDIUM TYPE: Floppy disk
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        NUMBER OF SEQUENCES: 2
CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  APPLICANT: Filpula, David
APPLICANT: Rollence, Michelle
TITLE OF INVENTION: Multivalent Antigen-Binding Proteins
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LENGTH: 744 base partype: nucleic acid STRANDEDNESS: both
                                                                                                                                                                                                                                                                                                                                                                                                                                     COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          COUNTRY: U.S.A.
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STRANDEDNESS: both
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350 GAAGTAGAGCCTTTCAGCA 332
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                               744 base pairs
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Hardman, Karl
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Pred. No. 49;
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US-09-166-093-12
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Best Local Similarity
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3 GAAGUCGAGGCUUUCAGCA 21
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350 GAAGTAGAGCCTTTCAGCA 332
                                             13;
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1..732
                                                     68.7%; Score 15.8; 68.4%; Pred. No. 49
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239.539 Million cell updates/sec
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Listing first 45 summaries
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/cgn2_6/ptodata/2/pubpna/US06_NEW_PUB.seq:*
/cgn2_6/ptodata/2/pubpna/US06_PUBCOMB.seq:*
/cgn2_6/ptodata/2/pubpna/US07_NEW_PUB.seq:*
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/cgn2_6/ptodata/2/pubpna/US09_NEW_PUB.seq:*
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US-09-983-580-1
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10 US-09-864-761-3226

10 US-09-989-643-155

10 US-09-974-300-179
                                                                                                                                                                                              US-09-991-936-838
US-09-791-578-5
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                                     Sequence 1, Appli
Sequence 3226, App
Sequence 155, App
Sequence 188, App
Sequence 8, Appli
Sequence 5, Appli
Sequence 1, Appli
Sequence 1, Appli
Sequence 1, Appli
Sequence 3, Appli
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           Sequence 19, Appl
Sequence 25, Appl
Sequence 139,
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US-10-067-514-1
                                                                                                                               US-09-864-761-3226/c
                                                                                                                                                RESULT
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15.2	15.2	15.2	15.2	15.2	15.2	15.2	15.2	15.2	15.2	15.2		15.2			15.2	15.4	15.6	15.6	15.6	15.6	15.6	15.6	. 15.6	15.6	15.6
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US-09-764-860-867	US-10-074-095-867	US-09-764-860-868	US-10-074-095-868	US-09-832-292-28	US-09-867-701-10873	US-10-114-893-187	US-10-198-846-13522	US-09-925-299-98	US-09-925-299-98	US-10-164-433-1	US-09-910-943-408	US-09-770-445-961	US-09-864-761-2467	US-09-960-352-3997	US-09-783-590-10265	us-09-770-791-695	US-09-952-213D-6	US-09-880-107-3945	US-09-880-107-1612	US-09-954-456-552	US-09-815-242-7828	US-09-938-842A-536	US-09-867-701-8410	US-09-878-574-3603	US-09-878-574-665
٠,٠	67	e 868		Sequence 28, Appl	Sequence 10873, A	Sequence 187, App	Sequence 13522. A	Sequence 98. Appl	Sequence 98. Appl	Sequence 1. Appli	408	961, A		Sequence 3997. Ap	1026	Sequence 695, App	Appl	Sequence 3945. Ap	Sequence 1612. An	Sequence 552. App		36. Ar		3603	Sequence 665, App

Sequence:

ALIGNMENTS

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; SOFTWARE: FastSEQ for Windows Version 4.0
; SEQ ID NO 1
; LENGTH: 1691139
; TYPE: DNA
; ORGANISM: Human
US-10-067-514-1
                                                                                                                                                              Sequence 3226, Application US/09864761 Patent No. US20020048763A1 GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Sequence 1, Application US/10067514 Publication No. US20030054531A1 GENERAL INFORMATION:
APPLICANT: Penn, Sharron G.
APPLICANT: Rank, David R.
APPLICANT: Hanzel, David K.
APPLICANT: Chen, Wensheng
TITLE OF INVENTION: HUMAN GENOME-DERIVED SINGLE EXON NUCLEIC ACID PROBES USEFUL FO
TITLE OF INVENTION: GENE EXPRESSION ANALYSIS BY MICROARRAY
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CURRENT APPLICATION NUMBER: US/10/067,5:
CURRENT FILING DATE: 2002-02-04
PRIOR APPLICATION NUMBER: US 09/811/352
PRIOR FILING DATE: 2001-03-19
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APPLICANT: Jonsdottir, Sif
APPLICANT: Reynisdottir, Sigridur Th.
TITLE OF INVENTION: HUMAN STROKE GENE
FILE REFERENCE: 2345.2010-003
                                                                                                                                                                                                                                                                                                                                 758783 CGAAGTGTATGCTTTCAGCATG 758804
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63.6%;
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; Pred. No. 41;
5; Mismatches
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PRIOR APPLICATION NUMBER: US 60/207,456

2000-02-04

CURRENT APPLICATION NUMBER: US/09/864,761
CURRENT FILING DATE: 2001-05-23
RIOR APPLICATION NUMBER: US 60/180,312

REFERENCE: Aeomica-X-1

PRIOR APPLICATION NUMBER:

2000-05-26 NUMBER: US 09/632,366

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RESULT 3
US-09-989-643-155/c
; Sequence 155, Application US/09989643
; Publication No. US20030049636A1
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Best Local S
Matches 13
GENERAL
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PRIOR APPLICATION NUMBER: GB 24263.6
PRIOR FILING DATE: 2000-10-04
PRIOR PRIOR
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EQ ID NO 3226
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ORGANISM: Homo
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  FILING DATE: 2000-06-30
APPLICATION NUMBER: US 09/774,203
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13; Conserv
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WEXPRESSED IN ADULT LIVER, SIGNAL
EXPRESSED IN PAAIN, SIGNAL = 1.5

EXPRESSED IN PLACENTA, SIGNAL = 1.2

EXPRESSED IN HELARY, SIGNAL = 1.2

EXPRESSED IN HELARY, SIGNAL = 1.2

EXPRESSED IN HELARY, SIGNAL = 1.2
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2000-09-27
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N BT474, SIGNAL = 1.2

N HEART, SIGNAL = 1.2

N HELA, SIGNAL = 1.3

N LUNG, SIGNAL = 1.3

N HBL100, SIGNAL = 0.98

N BONE MARROW, SIGNAL = 1.1

N FETAL LIVER, SIGNAL = 1
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; SEQ ID NO 179
; LENGTH: 1097
; TYPE: DNA
; ORGANISM: Bacillus licheniformis
US-09-974-300-179
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; TYPE: DNA
; ORGANISM: Fibrobacter succinogenes
US-09-989-643-155
                                                                                                                     US-09-991-936-838
                                                                                                                                          RESULT 5
                                                         Sequence 838, Application US/09991936 Publication No. US20030073827A1 GENERAL INFORMATION:
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Matches
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SEQ ID NO 155
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APPLICANT: Clausen, Ib Groth
TITLE OF INVENTION: Methods For Monitoring Multiple
TITLE OF INVENTION: Expression
FILE REFERENCE: 10085.500-US
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  CURRENT APPLICATION NUMBER: US/09/989,643

CURRENT FILING DATE: 2001-11-20

PRIOR APPLICATION NUMBER: EARLIER APPLICATION NUMBER: 09/297,539

PRIOR FILING DATE: EARLIER FILING DATE: 1999-05-09

PRIOR APPLICATION NUMBER: EARLIER APPLICATION NUMBER: 08/743,637

PRIOR FILING DATE: EARLIER FILING DATE: 1996-11-04

NUMBER OF SEQ ID NOS: 174
APPLICANT: Brandt, Kevin S. APPLICANT: Gaines, Patrick APPLICANT: Stinchcomb, Dan
                                                                                                                                                                                                                                                                                                                                                                                                                                                           PRIOR APPLICATION NUMBER: 60/279,526
PRIOR FILING DATE: 2001-03-27
NUMBER OF SEQ ID NOS: 8481
SOFTWARE: FastSEQ for Windows Version 4.0
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APPLICANT: Roy, Paul H.

TITLE OF INVENTION: Species-Specific, Genus-Specific and Universal DNA
TITLE OF INVENTION: Probes and Amplification Primers to Rapidly Detect
TITLE OF INVENTION: Identify Common Bacterial and Fungal Pathogens and
TITLE OF INVENTION: Associated Antibiotic Resistance Genes from
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     CURRENT APPLICATION NUMBER: US/09/974,300
CURRENT FILING DATE: 2001-10-05
PRIOR APPLICATION NUMBER: 09/680,598
PRIOR FILING DATE: 2000-10-06
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TITLE OF INVENTION: Identities of INVENTION: Assuring TILE REFERENCE: 12287.29
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l similarity 61.9%;
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Picard, Francis
                                                                                                                                                                                                 CGGAGTCGGCGCTTTCAGCAT 335
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Conservative
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                                                                                                                                                                                                                                                                                Score 16.2; r
Pred. No. 79;
5; Mismatches
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Pred. No. 38;
6; Mismatches
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                                                                                                                                                                                                                                                                              Gaps
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Patrick J.

Score 15.8; Pred. No. 1 Mismatches

.2e+02;

Indels Length

Gaps

0

B 10;

723; 0;

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PRIOR APPLICATION NUMBER: US/99/543,668;
PRIOR FILING DATE: 2000-04-07;
PRIOR APPLICATION NUMBER: US/99/543,668;
PRIOR APPLICATION NUMBER: 60/128,704;
PRIOR FILING DATE: 1999-04-09;
NUMBER OF SEQ ID NOS: 1959;
SOFTWARE: Patentin Ver. 2.1;
SEQ ID NO 838;
ILENCORP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   RESULT 6
US-09-791-578-5/c
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        FILE REFERENCE: FC-6-C1
CURRENT APPLICATION NUMBER: US/09/991,936
CURRENT FILING DATE: 2001-11-21
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                LENGTH: 550
TYPE: DNA
ORGANISM: Ctenocephalides felis
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   APPLICANT:
                                INFORMATION FOR SEQ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 PPLICANT: Wisnewski, Nancy
ITLE OF INVENTION: FLEA HEAD, NERVE CORD, HINDGUT AND MALPIGHIAN TUBULE
TILE OF INVENTION: NUCLEIC ACID MOLECULES, PROTEINS AND USES THEREOF
                                                                                                                                                                                                                                                                                                                                                                 CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/09/791,578
FILING DATE: 26-Feb-2001
CLASSIFICATION: cUnknown>
PRIOR APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  COUNTRY: USA
ZIP: 20005
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             CORRESPONDENCE ADDRESS:
CORRESPONDENCE STERNE, RESSLER, GOLDSTEIN & FOX P.L.L.C.
ADDRESSEE: STERNE, RESSLER, GOLDSTEIN & FOX P.L.L.C.
STREET: 1100 NEW YORK AVENUE, SUITE 600
                                                                                                                                                                         ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            FILPULA, DAVID R.

LEE, LIHSYNG S.

TITLE OF INVENTION: POLYALKYLENE OXIDE-MODIFIED SINGLE CHAIN
                                                                     TELECOMMUNICATION INFORMATION: TELEPHONE: 202-371-2600
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             NUMBER OF SEQUENCES:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      156 GAAGTTGAGGTTTTCAGCA 174
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           3 GAAGUCGAGGCUUUCAGCA 21
                                                                                                                                                                                                                                                                                                                                                                                                                                                                COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.30
                                                                                                                                NAME: JORGE A. GOLDSTEIN
REGISTRATION NUMBER: 29,021
                                                                                                                                                                                               APPLICATION NUMBER: US 60/063,074
FILING DATE: 27-CCT-1997
APPLICATION NUMBER: US 60/067,341
FILING DATE: 02-DEC-1997
                                N FOR SEQ ID NO: 5:
                                                                                                                 REFERENCE/DOCKET NUMBER: 0977.1840002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CITY: WASHINGTON
                                                                                                                                                                                                                                                                                                                       APPLICATION NUMBER: 09/069,842 FILING DATE: <Unknown>
                                                                                                                                                                                                                                                                                APPLICATION NUMBER: US 60/050,472 FILING DATE: 23-JUN-1997
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Conservative
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       4; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Score 15.8;
Pred. No. 1
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US-09-791-540-5/c
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                                                                                                                                                                                       INFORMATION FOR SEQ ID NO:
NAME/KEY: CDS
LOCATION: 1..723
SEQUENCE DESCRIPTION:
                                                                   FEATURE:
                                                                                                                                                                                                                                                 REGISTRATION NUMBER: 29,021
REFERENCE/DOCKET NUMBER: 09
TELECOMMUNICATION INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               NAME/KEY: CDS
LOCATION: 1..723
SEQUENCE DESCRIPTION: SEQ ID NO:
                                                                                                                                                                                                                                                                                                                                    ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CURRENT APPLICATION DATA:
                                                                                                                                                                     SEQUENCE CHARACTERISTICS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                PRIOR
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    NUMBER OF SEQUENCES:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               350 GAAGTAGAGCCTTTCAGCA 332
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                                                                                                    TYPE: nucleic acid
STRANDEDNESS: both
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             APPLICATION NUMBER: 09/069,842
FILING DATE: 1998-04-30
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          APPLICATION NUMBER: US/09/791,540
FILING DATE: 26-Feb-2001
CLASSIFICATION: <Unknown>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           COMPUTER: IBM PC compatible OPERATING SYSTEM: PC-DOS/MS-DOS SOFTWARE: Patentin Release #1.0,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        LENGTH: 723 base pairs
TYPE: nucleic acid
STRANDEDNESS: both
                                                                                                                                                                                                                                                                                                                                                                                                 APPLICATION NUMBER: US 60/063,074 FILING DATE: 27-OCT-1997
                                                                                                                                                                                                                                                                                                                                                                                                                                           APPLICATION NUMBER: US 60/050,472 FILING DATE: 23-JUN-1997
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               STATE: DC
                                                                                                                                                                                                                                                                                                                                                          APPLICATION NUMBER: US 60/067,341 FILING DATE: 02-DEC-1997
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            COUNTRY: USA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               CITY: WASHINGTON
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TOPOLOGY: both
                                                                                                                                                                                                                                TELEPHONE: 202-371-2600
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    LEE, LIHSYNG S.
OF INVENTION: POLYALKYLENE OXIDE-MODIFIED SINGLE CHAIN
                                                                                                                                             ENGTH: 723 base pairs
                                                                                                                                                                                                            TELEFAX: 202-371-2540
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ADDRESSEE: STERNE,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   WHITLOW, MARC
SHORR, ROBERT G.L.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  FILPULA, DAVID R.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    EE: STERNE, KESSLER, GOLDSTEIN & 1100 NEW YORK AVENUE, SUITE 600
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         POLYPEPTIDES
  SEQ ID NO:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               4;
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Version #1.30

FOX P.L.L.C

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                                                                     US-09-956-086-1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Sequence 1, Application US/09956086 Patent No. US20020155498A1 GENERAL INFORMATION:
                   Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Query Match
   Matches
                                                                                                                                                                                                                                                       INFORMATION FOR SEQ ID NO: 1:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TITLE OF INVENTION: SINGLE-CHAIN ANTIGEN-BINDING PROTEINS
CAPABLE OF GLYCOSYLATION, PRODUCTION AND USES THEREOF
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
                                                                                     SEQUENCE DESCRIPTION: SEQ ID NO: 1:
                                                                                                                                                    TOPOLOGY: both MOLECULE TYPE: cDNA
                                                                                                                                                                                                                                                                                        TELECOMMUNICATION INFORMATION: TELEPHONE: (202)371-2600
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           NUMBER OF SEQUENCES: 33
CORRESPONDENCE ADDRESS:
                                                                                                                                      FEATURE:
                                                                                                                                                                                                                                         SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                        ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              PRIOR APPLICATION DATA
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||||::|||||
350 GAAGTAGAGCCTTTCAGCA 332
   13;
                                                                                                                                                                                                                                                                                                                                                                                      APPLICATION NUMBER: 09/069,821
FILING DATE: <Unknown>
APPLICATION NUMBER: US 60/063,074
FILING DATE: 27-OCT-1997
APPLICATION NUMBER: US 60/050,472
FILING DATE: 23-JUN-1997
APPLICATION NUMBER: US 60/044,449
FILING DATE: 30-APR-1997
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Similarity
                                                                                                                                                                     TYPE: nucleic acid
STRANDEDNESS: both
TOPOLOGY: both
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         APPLICATION NUMBER: US/09/956,086 FILING DATE: 20-Sep-2001 CLASSIFICATION: <Unknown>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      COMPUTER: IBM PC compatible OPERATING SYSTEM: PC-DOS/MS-DOS SOFTWARE: Patentin Release #1.0,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ADDRESSEE: STERNE, KESSLER, STREET: 1100 NEW YORK AVE., CITY: WASHINGTON
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                COUNTRY: USA
ZIP: 20005
                                                                                                   NAME/KEY: CDS
LOCATION: 1..747
                                                                                                                                                                                                                                                                                                                                     NAME: KIM, JUDITH U.
REGISTRATION NUMBER: 40,679
                                                                                                                                                                                                                                                                          TELEFAX:
                                                                                                                                                                                                                                                                                                                       REFERENCE/DOCKET NUMBER:
                                                                                                                                                                                                                      ENGTH: 758 base pairs
   Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                WHITLOW, MARC
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            FILPULA, DAVID
                                                                                                                                                                                                                                                                        (202)371-2540
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                   68.7%;
Score 15.8; DI
Pred. No. 1.2e-
4; Mismatches
   4.
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Pred. No. 1
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                                                                                                                                                                                                                                                                                                                           0977.2280003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            GOLDSTEIN & FOX P.L.L.C. NW, SUITE 600
                 1.2e+02;
                                  DB 9;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  2e+02;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Version #1.30
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                DB 10;
                                  Length 758;
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   Indels
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Gaps
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US-09-956-087-1/c
                                                                                                                                                    US-09-956-087-1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Sequence 1, Application US Patent No. US20020161201A1 GENERAL INFORMATION:
                                                                          Matches
                                                                                                               Query Match
                                                                                           Best
                                                                                                                                                                                                                                                                                                                                         INFORMATION FOR SEQ ID NO: 1:
SEQUENCE CHARACTERISTICS:
                                                                                             Госат
                                                                                                                                                                                                                                                                                                                                                                                                                                                   ATTORNEY/AGENT INFORMATION:
NAME: KIM, JUDITH U.
REGISTRATION NUMBER: 40,679
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              APPLICATION NUMBER: US/09/956,087
FILING DATE: 20-Sep-2001
CLASSIFICATION: -Unknown>
PRIOR APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      SOFTWARE: Patentin Release #1.0, Version #1.30 CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
                                                                                                                                                                                                                                                                                                                                                                                              REFERENCE/DOCKET NUMBER: TELECOMMUNICATION INFORMATION: TELEPHONE: (202)371-2600
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TITLE OF INVENTION: SINGLE-CHAIN ANTIGEN-BINDING PROTEINS CAPABLE OF GLYCOSYLATION, PRODUCTION AND
                                                                                                                                                                     SEQUENCE DESCRIPTION: SEQ ID NO:
                                                                                                                                                                                                                            FEATURE:
                                                                                                                                                                                                                                                MOLECULE TYPE: cDNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               APPLICANT: FILPULA, DAVID
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  NUMBER OF SEQUENCES:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                3 GAAGUCGAGGCUUUCAGCA 21
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350 GAAGTAGAGCCTTTCAGCA 332
350 GAAGTAGAGCCTTTCAGCA 332
                                     3 GAAGUCGAGGCUUUCAGCA 21
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          APPLICATION NUMBER: 09/069,821
FILING DATE: 1998-04-30
APPLICATION NUMBER: US 60/063,074
FILING DATE: 27-0CT-1997
APPLICATION NUMBER: US 60/050,472
FILING DATE: 23-JUN-1997
APPLICATION NUMBER: US 60/044,449
FILING DATE: 30-APR-1997
                                                                                           Similarity
                                                                                                                                                                                                                                                                 TYPE: nucleic acid
STRANDEDNESS: both
TOPOLOGY: both
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Application US/09956087
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             COMPUTER: IBM PC compatible OPERATING SYSTEM: PC-DOS/MS-DOS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ZIP: 20005
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     CITY: WASHINGTON STATE: DC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ADDRESSEE: STERNE, KESSLER, STREET: 1100 NEW YORK AVE.,
                                                                                                                                                                                         NAME/KEY: CDS
LOCATION: 1..747
                                                                                                                                                                                                                                                                                                                                                                             TELEFAX: (202)371-2540
                                                                                                                                                                                                                                                                                                                    LENGTH: 758 base pairs
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       WHITLOW, MARC
LEE, LIHSYNG S.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              SHORR,
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                                                                                           68.7%;
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                                                                        Score 15.8; DB 9;
Pred. No. 1.2e+02;
4; Mismatches 2;
                                                                                                                                                                                                                                                                                                                                                                                                                                   0977.2280003,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          GOLDSTEIN & FOX P.L.L.C. NW, SUITE 600
                                                                                               Length 758;
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RESULT 10

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RESULT 11
US-09-791-578-3/c
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; LOCATION: (1)..(771)
US-09-985-442-1
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Best Local :
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 PRIOR APPLICATION NUMBER: 09/420,592
PRIOR FILING DATE: 1999-10-19
PRIOR APPLICATION NUMBER: 60/104,949
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                CURRENT APPLICATION NUMBER: US/09/985,442
CURRENT FILING DATE: 2001-11-02
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              APPLICANT: Wang, Macliang
APPLICANT: Whitlow, Marc D.
TITLE OF INVENTION: No. US20020156248Alel Method for Targeted Delivery of Nucleic Aci
FILE REFERENCE: 0977.2300003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             PRIOR FILING DATE: 1998-10-20
NUMBER OF SEQ ID NOS: 13
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              APPLICANT: Filpula, David R. APPLICANT: Wang, Maoliang APPLICANT: Whitlow, Marc D.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TYPE: DNA
ORGANISM: Artificial Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           FEATURE: OTHER INFORMATION: Description of Artificial Sequence: CC49/218 sfv
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                                                                                                                                                                         COMPUTER READABLE FORM:

READIM TYPE: Floppy disk

COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Ver
CURRENT APPLICATION DATA:
APPLICATION UMBER: US/09/791,578
FILING DATE: 26-Feb-2001
CLASSIFICATION: CUNKNOWN>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Local
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CORRESPONDENCE ADDRESSEE: STERNE, KESSLER, GOLDSTEIN & FOX P.L.L.C.
STREET: 1100 NEW YORK AVENUE, SUITE 600
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  APPLICANT: WHITLOW, MARC SHORR, ROBERT G.L. FILPULA, DAVID R.
                                                                                                                                                              PRIOR APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          NUMBER OF SEQUENCES:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          . Similarity
13; Conserv
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                                      APPLICATION NUMBER: US 60/050,472 FILING DATE: 23-UUN-1997 APPLICATION NUMBER: US 60/063,074 FILING DATE: 27-OCT-1997
                                                                                                                                                                                                                                                                                                                                                                                                         CITY: WASHINGTON
STATE: DC
                                                                                                                    APPLICATION NUMBER: 09/069,842 FILING DATE: <Unknown>
APPLICATION NUMBER: US 60/067,341 FILING DATE: 02-DEC-1997
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Conservative
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                                                                                                                                                                                                                                                                                                                                                                                  USA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      LIHSYNG S.
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Pred. No. 1
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US-09-791-540-3/c
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SEQUENCE DESCRIPTION: SEQ ID NO: US-09-791-578-3
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INFORMATION FOR SEQ ID NO:
                                                                                                                                 CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/09/791,540
FILING DATE: 26-Feb-2001
CLASSIFICATION: <UNKNOWN>
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 09/069,842
FILING DATE: 1998-04-30
APPLICATION NUMBER: US 60/050,472
FILING DATE: 23-JUN-1997
APPLICATION NUMBER: US 60/063,074
FILING DATE: 27-OCT-1997
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Local Similarity
REGISTRATION NUMBER: 29,021
REFERENCE/DOCKET NUMBER: 09
TELECOMMUNICATION INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CORRESPONDENCE ADDRESS:
ADDRESSEE: STERNE, KESSLER, GOLDSTEIN & FOX P.L.L.C.
STREET: 1100 NEW YORK AVENUE, SUITE 600
                                                                                                                                                                                                                                                                                                                                                                                                   COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
                                                                             ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TITLE OF INVENTION: POLYALKYLENE OXIDE-MODIFIED SINGLE CHAIN POLYPEPTIDES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   REGISTRATION NUMBER: 29,021
REFERENCE/DOCKET NUMBER: 09
TELECOMMUNICATION INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            NUMBER OF SEQUENCES:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           APPLICANT:
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                                                                                                                                                                                                                                                                                                                                       COMPUTER: IBM PC COMPATIBLE
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.30
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              CITY: WASHINGTON
STATE: DC
                                                                                               APPLICATION NUMBER: US 60/067,341 FILING DATE: 02-DEC-1997
                                                           NAME: JORGE A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                COUNTRY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TYPE: nucleic acid
STRANDEDNESS: both
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          NAME: JORGE A. GOLDSTEIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ENGTH: 782 base pairs
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ELEPHONE: 202-371-2600
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SHORR, ROBERT G.L.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 FILPULA, DAVID R. LEE, LIHSYNG S.
                                                                                                                                                                                                                                                                                                                                                                                                                                                            USA
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                                                           GOLDSTEIN
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Pred. No. 1
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                       0977.1840002
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US-09-985-442-3/c
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; LOCATION: (1)..(771)
US-09-983-580-1
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US-09-983-580-1/c
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                                                                      GENERAL INFORMATION:
APPLICANT: Filpula, David R.
APPLICANT: Wang, Macliang
APPLICANT: Whitlow, Marc D.
TITLE OF INVENTION: NO. US20020156248Alel Method for Targeted Delivery of Nucleic File REFERENCE: 0977.2300003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   SOFTWARE: PatentIn Ver. 2.1
SEQ ID NO 1
LENGTH: 782
                                                                                                                                                                                                                                                                                                                                                                               Matches
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                                                                                                                                                                                       Sequence 3, Application US/09985442 Patent No. US20020156248A1
                                                                                                                                                                                                                                                                                                                                                                                                                  Query Match
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APPLICANT: Wang, Macliang
APPLICANT: Whitlow, Marc D.
TITLE OF INVENTION: NO. US20020151061A1el Method for Targeted Delivery of Nucleic FILE REFERENCE: 0977.2300002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CURRENT APPLICATION NUMBER: US/09/983,580 CURRENT FILING DATE: 2001-10-25 PRIOR APPLICATION NUMBER: 09/420,592 PRIOR FILING DATE: 1999-10-19 PRIOR APPLICATION NUMBER: 60/104,949 PRIOR FILING DATE: 1998-10-20
CURRENT APPLICATION NUMBER: US/09/985,442
CURRENT FILING DATE: 2001-11-02
PRIOR APPLICATION NUMBER: 09/420,592
PRIOR FILING DATE: 1999-10-19
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           FEATURE:
OTHER INFORMATION: Description of Artificial Sequence: CC49/218 sfv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ORGANISM: Artificial Sequence
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LOCATION: 1..771
SEQUENCE DESCRIPTION: SEQ ID NO:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           MOLECULE TYPE: CDNA FEATURE:
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350 GAAGTAGAGCCTTTCAGCA 332
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       LENGTH: 782 base pairs
                                                                                                                                                                                                                                                                                                                                                                               Conservative
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                                                                                                                                                                                                                                                                                                                                                                                               68.78;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         PRIOR APPLICATION NUMBER: 60/104,949
PRIOR FILING DATE: 1998-10-20
NUMBER OF SEQ ID NOS: 13
SOFTWARE: Patentin Ver. 2.1
                                                                                                                                                                                                                                                                                   PRIOR FILING DATE: 1998-10-20 NUMBER OF SEQ ID NOS: 13
                                                                                                                                                                                                                                                                                                                              PRIOR APPLICATION NUMBER: 09/420,592
PRIOR FILING DATE: 1999-10-19
                                                                                                                                                                                                                                                                                                                                                               CURRENT APPLICATION NUMBER: US/09/983,580 CURRENT FILING DATE: 2001-10-25
                                                                                                                                                                                                                                                                                                                                                                                             APPLICANT: Wang, Medlang
APPLICANT: Whitlow, Marc D.
TITLE OF INVENTION: No. US20020151061Alel Method for Targeted Delivery of Nucleic
FILE REFERENCE: 0977.2300002
                                                                                                                                                                                                                                                                                                                                                                                                                            APPLICANT:
                                                                                                                                                                                                                                                                                                                  PRIOR APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                          APPLICANT: Filpula, David R.
                                                                                                                                                                                                TYPE: DNA ORGANISM: Artificial Sequence
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OTHER INFORMATION: Description of Artificial Sequence: CC49/218 sfv NAME/KEY: CDS
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ALIGNMENTS

ACCESSION VERSION KEYWORDS JOURNAL COMMENT REFERENCE AUTHORS TITLE SOURCE ORGANISM RESULT 1 BF251708/c LOCUS FEATURES DEFINITION source Coccidioides immitis.

Coccidioides immitis.

Coccidioides immitis

Eukaryota; Fungi; Ascomycota; Pezizomycotina; Eurotiomycetes;

Onygenales; mitosporic Onygenales; Coccidioides.

1 (bases 1 to 123)

Gardner, M. J. and Kirkland, T.

Generation of ESTs from Coccidioides immitis spherule cDNA library Unpublished (2000)
Contact: Malcolm J. Gardner
Department of Eukaryotic Genomics
The Institute for Genomic Research
9712 Medical Center Drive, Rockville,
Tel: 301 838 3519
Fax: 301 838 0208 BE7251708 123 bp mRNA linear EST 15-NOV-2001 EST41B892 Coccidioides immitis spherule cDNA library Coccidioides immitis cDNA clone CIAAK37 5' sequence, mRNA sequence. Email: gardner@tigr.org.
Location/Qualifiers EST BF251708.1 GI:16931774 /organism="Coccidioides immitis" /db_xref="taxon:5501" /clone="CIAAK37" /clone_lib="Coccidioides immitis spherule cDNA library" MD 20850, USA

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Contact: Malcolm J. Gardner
Department of Eukaryotic Genomics
The Institute for Genomic Research
9712 Medical Center Drive, Rockville,
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1 (bases 1 to 351)

Gardner, M.J. and Kirkland, T.
Generation of ESTs from Coccidioides immitis spherule cDNA library
Coccidioides immitis.
Coccidioides immitis
Eukaryota; Fungi; Ascomycota; Pezizomycotina; El
Onygenales; mitosporic Onygenales; Coccidioides
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Location/Qualifiers
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Gardner,M.J. and Kirkland,T.
Generation of ESTs from Coccidioides
Unpublished (2000)
Contact: Malcolm J. Gardner
                                                                                                                                                                                                                                                                                                                                                                                     Coccidioides immitis
Coccidioides immitis
Eukaryota; Fung1; Ascomycota; Pezizomycotina; Eu
Eukaryota; Fung1; Ascomycota; Coccidioides
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          377 bp mRNA linear ES EST419226 Coccidioides immitis spherule cDNA library C immitis cDNA clone CTAAP15 5' sequence, mRNA sequence. EF251964
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15; Conserv
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Fax: 301 838 0208
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The Institute for Genomic Research
                                                                                                                                                                                                                                                                                                                     Unpublished (2000)
Contact: Malcolm J. Gardner
                                                                                                                                                                                                                                                                                                                                                                                                                                                  EST
                                                                                                                                                                                                                                                                                          Department of Eukaryotic Genomics
The Institute for Genomic Research
                                                                                                                                                                                                                                                                                                                                                              1 (bases 1 to 377)
Gardner, M.J. and Kirkland, T.
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                                                                                                                                                                                                                                 gardner@tigr.org
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/db_xref="taxon:5501"
/clone="CIAAM73"
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                                                                                                              /clone_lib="Coccidio1des immitis
/dev_stage="spherule"
/lab_host="SOLR"
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/dev_stage="spherule"
/lab_host="SOLR"
                                                                                               /note="Vector: pBluescript SK(-);
                                                                                                                                                            /clone="CIAAP15"
                                                                                                                                                                        /db_xref="taxon:5501"
                                                                                                                                                                                      /organism="Coccidioides
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Pred. No. 1
             Score 18.8; DB 12;
Pred. No. 1.1e+02;
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                                                                                                             Eukaryota; Fungi; Ascomycota; Pezizomycotina; Eurotiomycetes; Onygenales; mitosporic Onygenales; Coccidioides.

1 (bases 1 to 391)
Gardner, M.J. and Kirkland, T. Generation of ESTs from Coccidioides immitis spherule cDNA library
              Department of Eukaryotic Genomics
The Institute for Genomic Research
9712 Medical Center Drive, Rockvil.
Tel: 301 838 3519
Fax: 301 838 0208
                                                                                       Unpublished (2000)
Contact: Malcolm J. Gardner
                                                                                                                                                                                             Coccidioides immitis.
                                                                                                                                                                                                                                                                    BF251561 391 bp mRNA
EST418910 Coccidioides immitis spherule
immitis cDNA clone CIAAK57 5' sequence,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Eukaryota; Fungi; Ascomycota; Pezizomycotina; Eurotiomycetes; Onygenales; mitosporic Onygenales; Coccidioides.

1 (bases 1 to 378)
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                                                                                                                                                                                                                                         BF251561.1 GI:16931792
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Email: gardner@tigr.org.
Location/Qualifiers
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The Institute for Genomic Research
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Generation of ESTs from Coccidioides immitis
Smail: gardner@tigr.org.
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/dev_stage="spherule"
/lab_host="SOLR"
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/db_xref="taxon:5501"
/clone="CIAAP18"
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68.2%;
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Blumeria graminis f. sp. hordei
Eukaryota; Fungi; Ascomycota; Pezizc
Erysiphales; Erysiphaceae; Blumeria.
1 (bases 1 to 486)
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    BF251704
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Tel: 45 3327 5230
Fax: 45 3327 4766
                                                                                                                                                                                                                                                                                                                                  Email: swr@crc.dk
High quality sequence stop:
                                                                                                                                                                                                                                                                                                                                                                                                                   Contact: Rasmussen, S.W.
Department of Yeast Genetics
                                                                                                                                                                                                                                                                                                                                                                                                                                                expressed sequence tag analysis 
Unpublished (2000)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Gene identification in the fungal
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Thomas, S.W., Rasmussen, S.W., Glaring, M.A.,
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                                                                                                                            Conservative
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                                                                                                                                                                                         /organism="Blumeria graminis f
/db_xref="taxon:62688"
/clone="D00948"
/clone_llb="Lambda Zap, Strata
/cell_type="conidia"
/lab_host="Hordeum vulgare"
a 101 c 115 g 132 t
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/db_xref="taxon:5501"
/clone="CIAAK57"
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/lab_host="SOLR"
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Contact: Malcolm J. Gardner
                                                                                                                                                                                                           Gardner, M.J. and Kirkland, T. Generation of ESTs from Coccidioides
                                                                                                                                                                                                                                  Eukaryota; Fung1; Ascomycota; Pezizomycotina; Eurotiomycetes; Onygenales; mitosporic Onygenales; Coccidioides.
1 (bases 1 to 502)
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Tel: 301 838 3519
Fax: 301 838 0208
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The Institute for Genomic Research
9712 Medical Center Drive, Rockville,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Unpublished (2000)
Contact: Malcolm J. Gardner
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Gardner, M.J. and Kirkland, T.
Generation of ESTs from Coccidioides immitis spherule cDNA library
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                                                                                                                                                      Department of Eukaryotic Genomics
The Institute for Genomic Research
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301 838 3519
301 838 0208
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Location/Qualifiers
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Location/Qualifiers
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                           /organism="Coccidioides
/db_xref="taxon:5501"
/clone="CIAAY35"
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/dev_stage="spherule"
/lab_host="SOLR"
/clone_lib="Coccidioides
/dev_stage="spherule"
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/db_xref="taxon:5501"
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Blumeria graminis f. sp. hordei.
Blumeria graminis f. sp. hordei
Blumeria graminis f. sp. hordei
Eukaryota; Fungi; Ascomycota; Pezizomycotina; Leotiomycetes;
Erysiphales; Erysiphaceae; Blumeria.
1 (bases 1 to 515)
                                                                                              BF251715 518 bp mRNA linear ESET418899 Coccidioides immitis spherule cDNA library Cimmitis cDNA clone CIAAK45 5' sequence, mRNA sequence.
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D01189-R Lambda Zap,
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Eukaryota; Fungi; Ascomycota; Pezizomycotina; Eurotiomycetes;
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15; Conserv
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Tel: 45 3327 5230
Fax: 45 3327 4766
                               Coccidioides immitis.
                                                                BF251715.1 GI:16931781
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Email: swr@crc.dk
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Contact: Rasmussen, S.W. Department of Yeast Genetics
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Unpublished (2000)
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Gene identification
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/clone_11b="Lambda Zap, Stratagene"
/cell_type="conidia"
/lab_host="Hordeum vulgare"
                                                                                                                                                                                                                                                                                                                                                                                                                                  /organism="Blumeria graminis
/db_xref="taxon:62688"
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The Institute for Genomic Research
9712 Medical Center Drive, Rockville,
Tel: 301 838 3519
Frax: 301 838 0208
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1 (bases 1 to 541)
Gardner, M. J. and Kirkland, T.
Generation of ESTs from Coccidioides immitis spherule cDNA library
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The Institute for Genomic Research
9712 Medical Center Drive, Rockville,
Tel: 301 838 3519
Fax: 301 838 0208
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Generation of ESTs from Coccidioides immitis spherule cDNA library
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/dev_stage="spherule"
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/db_xref="taxon:5501"
/clone="CIAAV41"
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Coccidioides immitis.

Coccidioides immitis

Eukaryota; Fungi; Ascomycota; Pezizomycotina; Eurotiomycetes;
Onygenales; mitosporic Onygenales; Coccidioides.

E 1 (bases 1 to 567)

Is Gardner, M.J. and Kirkland, T.

Generation of ESTs from Coccidioides immitis spherule cDNA libration of ESTs from Coccidioides immitis spherule cDNA libration of Extraction of Estraction of Extraction of Extracti
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1 (bases 1 to 546)

Gardner, M.J. and Kirkland, T.

Generation of ESTs from Coccidioides immitis spherule cDNA library
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The Institute for Genomic Research
9712 Medical Center Drive, Rockville,
Tel: 301 838 3519
Fax: 301 838 0208
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Other_ESTs: EST445665
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182 CGAAGTCGAGGTTTTTAGCATG 161
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Contact: Malcolm J. Gardner
Department of Eukaryotic Genomics
The Institute for Genomic Research
9712 Medical Center Drive, Rockville, MD 20850, USA
Tel: 301 838 3519
Fax: 301 838 0208
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Coccidioides immitis.

Coccidioides immitis.

Eukaryota; Fungi; Ascomycota; Pezizomycotina; Eurotiomycetes;

Eukaryota; Fungi; Ascomycota; Coccidioides.

1 (bases 1 to 568)

Gardner, M. J. and Kirkland, T.

Generation of Errs from Coccidioides immitis spherule cDNA library
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Email: gardner@tigr.org.
Location/Qualifiers
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